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Report

of the

Medical Officer of Health

City of Glasgow



1966

THE CORPORATION OF THE CITY OF GLASGOW

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of the
Medical Officer of Health
City of Glasgow



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POLLOKSHAWS CLINIC AND NURSERY 1966.

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HEALTH AND WELFARE COMMITTEE, 1966-1967

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1966

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Depute Medical Officer of Health

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<i>South-Western Division</i>		W. DEREK WILSON, M.B., Ch.B., D.P.H.

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<i>North</i>	...	...	...	JOHN D. ARTON
<i>East</i>	...	...	...	JOHNSTON N. LANDER
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<i>Smoke Control Areas</i>	...	IAN MACPHERSON, B.Sc., F.R.S.H.

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Miss CATHERINE MILLER

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M.C., Path.

Depute Director ... MORAG C. TIMBURY, M.D., M.C.,
Path.

(now succeeded by Matthew
Laidlaw, M.B., Ch.B.)

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PREFACE

While the duty of presenting this Annual Report falls to me the work it records was carried out by the Department under the leadership of Dr. Wm. A. Horne. Dr. Horne retired on 22nd March, 1967, after more than forty years' service with the Corporation, during the last eleven of which he was Medical Officer of Health. Many tributes have been paid to him elsewhere, but I would like to take this opportunity of recording in permanent form the appreciation by his staff both past and present of his qualities of administration and guidance and also my own gratitude to him for much kindness and help so willingly given.

One of the important points in the year under review is that the population of the City has dropped below the million mark, the Registrar-General's estimate as at 30th June, 1966, being 979,798, a decrease of a little over 21,000. From the information supplied by the Registrar-General it would appear that this fall can be accounted for by emigration abroad and by migration outwith the City, some to other areas of Scotland and the United Kingdom but chiefly into adjacent counties.

The institutional population as shown in the various wards this year has undergone a change which is worthy of note. The Royal Hospital for Sick Children which previously was situated in Ward 12 now appears in Ward 15, the reason being the transfer of the patients and staff from Yorkhill to Oakbank Hospital to allow for the urgent repairs at Yorkhill. An addition to the ward population is seen in Ward 34 where Cowglen Hospital was officially opened in October, 1966, to provide accommodation for 194 geriatric and 50 young chronic sick patients. On 30th June, 1966, this hospital's population, including staff, was 105.

Anderston Ward shows a decrease of 506 persons. This is accounted for by redevelopment and also the closure of two common lodging houses.

The average density of population in the City fell from 25 persons per acre in 1965 to 24. It is of interest to note that three of the oldest wards in the City, namely, Townhead, Gorbals and Woodside, which were until recently the most densely populated, have as a result of the redevelopment of the most congested areas shown a marked reduction in their density, and in fact both Gorbals and Townhead Wards now show a density which is lower than that of North Kelvin.

A return of occupied and unoccupied houses as at Whitsunday compiled each year by the City Assessor shows that there has been a decrease again this year in the number of occupied houses to 317,715, being 784 fewer than in 1965.

All sizes of houses show a decrease with the exception of the three apartment and one apartment houses. Compared with 1965 there is actually an increase of 477 in the latter. This increase in the one apartment houses appears in no less than 24 of the wards and varies from three in Pollokshaws to 297 in Park. The unusually large increase in this ward is almost wholly due to the subdivision of the larger type of house with the creation of "multiple occupancies." Most of the instances of increase in other wards are due to the provision of new housing for single or elderly persons. With the advent of this latter type of accommodation it should now be considered that the category of "one-apartment house" is no longer synonymous with a "single end" but refers also to a service flat or specially designed accommodation for elderly people.

There has been a notable decrease in the number of births registered, 19,766 compared with 20,846 in 1965 and consequently, although there was a reduction in the City population, there is also a reduction in the birth rate from 20·8 to 20·2. On the other hand, the number of illegitimate births increased from 1,606 to 1,749. This is equivalent to 8·8 per cent. of the total live births as against 7·7 last year.

The death rate, which in 1964 at 12·1 was the lowest in ten years, rose to 12·74 in 1965 and this year has fallen slightly to 12·7. The decrease in the number of deaths was markedly greater among females, the actual number dropping from 6,138 to 5,893. Male deaths totalled 6,548, a decrease of 75. Pulmonary tuberculosis accounted for 95 deaths during the year, a decrease of 45. Male deaths from this disease exceeded female deaths by three to one. Deaths from non-respiratory tuberculosis, of which there were 13 in 1966, showed an increase on 1965 when there were only eight.

INFECTIOUS DISEASE.

The record low incidence noted in 1965 was reduced still further, the decrease being mainly due to an unusually low prevalence of chickenpox. This reduction, however, should be viewed with care as there is reason to believe that part of it at least may be attributed to incomplete or incorrect reporting. It will be recalled that chickenpox is not a notifiable disease. Despite the over-all reduction there was

some slight increase in the three common infections, pneumonia, whooping cough and measles. Three cases of poliomyelitis were notified during the year but in none of these was the diagnosis confirmed. The year 1966 is also the tenth consecutive year in which there has been no case of diphtheria. Although 28 cases were notified they were all subsequently diagnosed as other conditions.

There were 6,298 admissions to hospital, a reduction of 418 on the previous year and this total includes nearly 1,700 cases removed to hospital as infectious disease but ultimately diagnosed as other non-infectious conditions. Pneumonia and dysentery continue to make the heaviest demand on hospital accommodation. Of all the infectious disease cases admitted, 43 per cent. were suffering from pneumonia.

Notifications of primary vaccination and revaccination against smallpox were received from medical practitioners during the year, 3,174 being primary vaccinations and 1,586 revaccinations. In addition, 3,370 primary vaccinations were carried out at child welfare clinics. Thus in all 6,544 primary vaccinations were done during the year compared with 5,786 in the previous year which in turn was an increase on 1964.

One case of typhoid fever was registered, a Pakistani baby girl who may well have been infected by a relative. Details of this case are given in the text.

Paratyphoid fever registrations showed a marked drop to six as compared with 41 last year.

Dysentery figures also fell from 2,104 to 1,782. Every ward in the city was again affected to some extent but there was as usual wide differences between the various wards.

The number of incidents of food poisoning notified was 87. During the past three years the number has been steadily falling and again this year the fall in the number of incidents has been accompanied by a corresponding decrease in the number of cases.

The decline in the incidence of scarlet fever has continued.

Although no case of poliomyelitis occurred during the year, wild strains of poliomyelitis virus are becoming less prevalent and thus there is less opportunity for persons to acquire a natural immunity to the

disease. It is thus imperative that the percentage of children immunised should be maintained at a high level and in this connection attention is drawn to the successful vaccination campaign carried out in the Spring of 1966 which is described in the section on Health Education. This campaign raised the percentage of the child population aged six months to four years protected from 58 per cent. to over 80 per cent.

In the past few years the number of cases of scabies seen has been falling. It would appear, however, that now this fall has been arrested and this year there has been a slight increase in both the number of cases recorded and the number of families affected. This again emphasises the importance of treatment facilities for this condition for which the City is singularly ill-equipped.

Notifications of pulmonary tuberculosis numbered 634 compared with 721 in 1965 and 814 in 1964. The corresponding figures for non-pulmonary tuberculosis were 102 in 1966 and 104 in 1965.

The total number of vaccinations by B.C.G. showed a considerable decrease from over 27,000 the previous year to a little over 25,000 this year. This is partly explained by a drop in the number of contacts of tuberculosis who were dealt with and is to be expected if the drop in notifications continues. School vaccinations fell from 31,549 to 13,068 and the fall is due to the increasing proportion of 13-year-olds who had been vaccinated previously. This represents a success rate of 96·7 per cent. which is fractionally better than the previous year and is a very creditable performance. Consent forms were issued to parents in respect of 15,655 school children and consent obtained in respect of 15,133.

MATERNAL AND CHILD CARE.

A slight rise in the infant mortality rate occurred during the year, the rate rising from 28·1 to 30. The actual number of deaths was 586 in 1965 and 598 in 1966.

Twelve cases of rickets were discovered as a result of the work of the Social Paediatric Research Group. Three of the cases were in immigrant children. The practice is for the Research Group when they discover any abnormalities of note to notify the cases to the Department and thus to the health visitor who along with the dietitian follows up the cases in their own homes.

The year also saw the opening of the Pollokshaws Clinic and the consequent closing of Bengal Street. There is little doubt that the new clinic will add very substantially to the facilities of the district and is an asset in every respect.

In March the use of the Guthrie Test was adopted for children born at home and also for those who were dismissed from hospital before the test was carried out.

The Broomhill Centre received its first group of mentally handicapped children of school age.

The maternal death rate again fell, from 0·65 to 0·15.

Home accidents notified increased in number from 4,354 to 4,703.

That very acceptable book "The Health of Mother and Child" was rewritten and re-issued.

During the year many visitors from both home and overseas visited the Balvicar Centre, and it is with pleasure that we record the valuable assistance rendered by voluntary helpers.

HEALTH VISITOR TRAINING.

This was the first year of the new syllabus issued by the Council for the Training of Health Visitors and thus is a landmark. Details of the training are given in the body of the Report. It was also the first full year in which public health training was given to student nurses as recommended by the General Nursing Council for Scotland.

The Health Visitors' Training School continued as before with a full class and is looking forward to moving into new accommodation in 1967.

HOME HELP SERVICE.

At the end of the year there were 1,789 helps on the register. Of these 343 were full-time and 1,446 part-time. Twenty-nine helps were specially designated for assistance in households with tuberculous cases.

The demand for help still exceeds the supply, the heaviest demand being from the elderly and the chronic sick groups. The supply of assistance must of course always be regulated by the labour and finance available.

An interesting reduction occurred in the number of helps asked for by maternity cases. This is a reflection of the fall in the birth rate.

HOME NURSING SERVICE.

The staff is still below complement, although there has been a minimal improvement over the year. The total number of visits made is slightly reduced and also the number of cases dealt with. This fall is almost totally confined to the midwifery section.

An increased demand for visits in order to give injections, chiefly for cases of anaemia, and treatment with penicillin has been noted, while there has been a reduction in the injections asked for in cases of diabetes and in the giving of diuretics.

The number of patients over 65 years of age continues to increase. The reduction in the number of visits made by the staff mentioned above highlights the danger in taking a factor such as this as an indication of the amount of work done because it takes no account of the length of time which has to be spent with any one case.

PORT HEALTH AUTHORITY.

The two main features of the year were the formation and coming into operation of the Clyde Port Authority and the Public Health (Ships) (Scotland) Regulations, 1966. The Regulations were largely for the purpose of consolidation but at the same time the opportunity was taken to bring them into line with modern conditions.

The total number of ships and tonnage using the port increased, but the number of ships and the tonnage from foreign ports was slightly reduced.

Apart from one case of pulmonary tuberculosis and one of enteric fever no major infectious disease appeared.

During the year the port medical staff immunised 111 seamen against yellow fever, 51 against cholera, and 14 against smallpox. A marked improvement was noted in the number of seamen now carrying valid inoculation certificates.

A slightly larger number of aliens, 280 as against 240 in 1965, arrived in the port in 99 vessels as against 74 in 1965.

With the closing of the Queen's Dock Hostel on account of lack of support by the shipping companies a feature of the Glasgow port has disappeared. The present hostel was built in 1928 with accommodation for 97 seamen from India and Pakistan and was intended for the use of crews during transit. It will be missed by the Port Health Authority as it was a most convenient means of maintaining daily health checks on seamen flying in from infected countries.

A new feature in respect to imported foodstuffs is the arrival of lard from continental ports in bulk. This has led to confusion as to its origin and documentation. There are, however, signs now that a solution to this problem is in sight.

HOUSING.

The number of houses completed was 5,010, the highest for the past five years.

The number of families with tuberculous patients recommended under the tuberculosis scheme for rehousing was practically the same, as was the number actually rehoused. On the other hand, the general medical priority scheme showed an increase of over 100 recommendations.

Representations of unfit houses under the Housing Acts increased by nearly 400 to 2,487. The supervision of tenants in housing schemes continued, 14,693 households being under supervision at the end of the year. Unfortunately there is as yet no great increase in the number showing improved conditions of cleanliness. Indeed, this year while there was a slight increase in the number of "fairly clean" households this was at the expense of the "clean" households.

The disinfestation unit continued as before, and again the Department is most happy to acknowledge the generous help received from Glasgow University Zoology Department.

OCCUPATIONAL HEALTH.

The work of this section continues unabated. Of the 3,711 persons examined for the first time for entrance, sick pay or superannuation purposes 22·3 per cent. were found unfit, the commonest cause for rejection being obesity, followed by hypertension, both of which causes were more prominent among females.

The total number of examinations made for all purposes was 4,385. This is again an increase on the previous year.

GENERAL SANITARY OPERATIONS

Throughout the year the number of nuisances brought to the notice of the Department showed an increase, as also did the number which were abated. At the same time the number which were eventually the subject of Court proceedings also showed an increase. These three figures are obviously connected.

Work under the Glasgow Corporation Order Confirmation Act, which gives the local authority power to deal with choked drains, in the event of failure by the owners to do so, continued at much the same level as in previous years.

It will be noted with interest that the number of properties recorded as abandoned at 31st December, 1966, showed a decrease from the previous year, the relevant figures being 71 as against 101. The 71 properties contained 715 houses.

A great deal of work and time was spent by the staff in the inspection of offices and shops. More premises were dealt with than in the previous year, and of course there was a corresponding increase in the contraventions found and remedied. There is still a lot to do in this respect, and with the very numerous calls on their time the staff is stretched to the utmost. Unfortunately also many of the occupiers and owners make no attempt to implement the requirements of the Act until visited by an enforcement officer.

During the year the most useful and acceptable visitation of old and infirm persons, particularly those living alone, was carried out by both the health visitors and the public health nurses attached to the divisions. The numbers on the register are steadily increasing, as are the numbers of houses cleaned and compassionate washings arranged. Fortunately the year was not a severe one in respect to the weather, and this in itself helped to ease the burden of elderly persons living alone.

In the body of the Report there is recorded a most interesting incident of poisoning by mercury. This involved a family of five who were admitted to the Western Infirmary suffering from poisoning. The Department investigated the home circumstances and it was

found that their three-apartment house had been extensively contaminated by the spillage of mercury which was distributed throughout all apartments.

The tables in respect to the operation of the relevant parts of the Factories Act, 1961, as requested by the Ministry of Labour, are included.

They show a reduction of almost 300 in the number of defects discovered and a similar decrease in the number of inspections.

VENEREAL DISEASE

Dr. Schofield, the Regional Consultant who contributes the report in this section, remarks that the number of new patients attending the venereal disease clinics continued to rise during the year, 5,492 attending as compared with 5,089 in 1965. The number carried over from 1965 increased as a result of the policy of maintaining patients under surveillance for three months from the risk of infection so that the total number of patients dealt with showed an increase to 7,139. The increase affected both sexes almost equally. The patients attending and found not to have venereal disease constituted a similar proportion to the previous year, while the number of patients with venereal, gonorrhoeal and trichomonas infections continued to rise at a marked rate. The number of male patients attending of their own accord to seek reassurance following risk of infection also increased.

A sharp rise was also noted in the number of both male and female patients with contagious syphilis. This was apparently in part at least due to the shipping strike when a number of seamen returned home carrying the infection before being diagnosed. Against this there was a drop in the number of patients with late acquired syphilis.

Ante-natal blood testing revealed an over-all incidence of syphilis among those tested of 0.089 per cent. This is a marked rise as compared with the previous two years, 0.058 per cent. in 1965 and 0.026 per cent. in 1964.

Fourteen cases of gonococcal ophthalmia were dealt with in 1966. Thus the number of babies with this condition continues to increase and it is apparent that there is a lack in the antenatal care of their mothers.

The year also showed an increase in the number of male patients in the younger age groups suffering from gonorrhoea, and this is in line with the findings of the rest of the country. The rise in the numbers of females has continued, the age group most affected being 25-34.

Referring to contact tracing Dr. Schofield notes that over 90 per cent. of female contacts about whom information was received were located and persuaded to attend for treatment by the health visitor. "This reflects the exceptional efficiency and ability of the contact tracers . . .".

HEALTH EDUCATION

Two health education campaigns, both of which required extensive preparation, were launched during the year. One of these was in respect to poliomyelitis. Although Glasgow had been free of polio since 1963 by 1966 it was estimated that nearly 47,000 children were in need of immunisation and that the average protection had fallen to a little over 52 per cent. of those of pre-school age. In addition, the Professor of Virology at Glasgow University informed the Medical Officer of Health that in view of the types of viruses that his department had been isolating, 1966 could be a polio year. It was therefore decided to launch a massive campaign beginning in March.

In 1964 a survey had been carried out by means of interviews in four of the City wards in which there was a low level of protection. This survey gave an indication of the media by which people received their information and this information was used in planning the campaign.

The actual campaign involved very extensive work by the staff, particularly the health visitors who on many occasions had actually to carry out the process of immunisation in the child's own home owing to the difficulty in persuading some parents to bring the children to the clinics even in spite of mobile clinics being employed to take the service as close to the homes as possible.

The total result of the campaign was a raising of the immunisation level to 80 per cent., and this speaks more eloquently than I can for the work done.

The second large campaign during the year was that carried out in respect to poisonous drugs. During the previous year the Glasgow Home Safety Committee had been greatly concerned at the number

of home accidents due to poisonous drugs, particularly those involving children, and it was decided to mount a campaign, the aim of which was to persuade individual members of the public to take stock of the drugs and medicines in their homes and to return those no longer required to the nearest chemist who would have them destroyed. With the co-operation of the Glasgow Branch of the Pharmaceutical Society of Great Britain, the Scottish Pharmaceutical Federation and, of course, the individual chemists and the Press a very successful campaign was run. An exhibition situated in one of the large City stores by courtesy of House of Fraser was of considerable assistance. It is estimated that over 4,000 items were returned to chemists' shops during the period.

In both these campaigns the Department is indebted to the encouragement and assistance it received from the Lord Provost who was good enough to inaugurate both of them and to appear on television on their behalf.

Apart from these campaigns work was carried on by the Health Education Section in the production of display units on various topics for use in the clinics.

AIR PURIFICATION

Since the inception of the Clean Air Act in 1956 steady progress has been made. This year the City has 100,000 premises under Smoke Control Area Orders and next year this figure will be increased to 130,000 premises.

Cathcart (Nos. 1 and 2) and Dennistoun Smoke Control Area Orders came into force in the autumn of 1966. Orders in respect of Pollokshaws (No. 2), Camphill, Govanhill and Langside will be in force in the autumn of 1967.

Preliminary survey work in respect to Fairfield and Whiteinch is nearing completion. These wards contain some 14,000 premises, and preliminary work was also carried out in Yoker and Kelvinside.

It is expected that by the end of 1967 the acreage of the City covered by Smoke Control Area Orders will be in the region of 47 per cent. and of the population 41 per cent.

Supplies of solid smokeless fuels have been reasonable, but the introduction of North Sea gas may have an effect on the supplies of Gluco from the Scottish Gas Board.

It will be seen from the figures in the text that the Air Purification Section has been extremely active. Observations on chimneys and inspections of steam boilers and other furnaces continued at the same high level, while control of the ever increasing number of domestic dwellings coming under Smoke Control Orders now constitutes the major portion of the field work. This entails early, late and weekend duties, and one result has been to make it abundantly clear that as long as coal merchants are allowed to retail bituminous coal in smoke control areas the public will buy it.

During the year 68 prosecutions were taken in respect to domestic smoke offences and 302 warning letters were sent out. All cases were dealt with by the Stipendiary Magistrate in the Central Police Court.

Probably the most important improvement made during the year has been the partial conversion of Dalmarnock Power Station from solid fuel to oil firing. In the past this area has been subjected to a continual fall-out of grit and dust. Similarly, although Braehead Power Station is not in the City itself, this station with its consumption of 20,000 tons of solid fuel per week emits dust and grit which is carried by the prevailing winds across the river and deposited in the Whiteinch area. Despite the high efficiency of the electrostatic precipitators it is estimated that with a south-west wind a total of 45 tons is deposited in the City each week. This matter is being actively pursued with the Alkali Inspector and St. Andrew's House.

The educational activities of the section continue and again a most successful class for the training of boiler operatives has been held. This class which is run by the Scottish Division of the National Society for Clean Air, is held in the Lecture Room of the Health and Welfare Department at 20 Cochrane Street.

MENTAL HEALTH

During the year a new Senior Occupational Centre for females was opened in premises formerly the Pollokshields Burgh Hall, and the Scottish Society for Mentally Handicapped Children opened a short-stay home at Alyth for males over 13 years of age.

The courses of training for staff continued and in particular the well established Glasgow courses for medical officers in mental deficiency and psychiatry. Six of the Department's medical staff attended the former course and eight the latter. In London, Professor Caplan of

Harvard University conducted courses in the prevention of mental ill health and these were attended by three medical officers and one health visitor, while also during the year the Health Department in Edinburgh organised a three-weeks' course for mental health officers and three of the Glasgow staff attended. These courses were of great value.

Unfortunately owing to rearrangement of staffing, etc., at the University it was not found possible to continue the series of courses for the training of health visitors in after-care, but it is gratifying to record that arrangements have been made to restart these courses under the auspices of Strathclyde University.

In 1964 Jordanhill College had arranged for the training of staff dealing with mentally defective children and during 1966 a further seven of the Department's staff received this important training.

The child development clinics at Glenfarg Street and at the Balvicar Centre experienced a considerable increase in their work. The special nurseries at Balvicar Centre and at Broomhill have been fully occupied and there is no doubt that these nurseries have had excellent results in improving the prospects of their charges and have emphasised the importance of starting with the youngest defective children.

The number of mentally disordered patients detained under guardianship and also under informal care changed little during the year.

After-care by the specially trained health visitors of the mentally ill increased. There were 440 patients receiving visits at the end of 1966 and 19 health visitors were employed in this valuable work.

BLIND PERSONS

Comparing the number of certified blind in 1966 with the corresponding number in 1965, the difference is less than 2 per cent., and if the pre-war five-year period ending in 1938 is compared with the five-year period ending in 1966 there is a slight fall of 7.4 per cent. This fall when further analysed, however, shows that while the total fall is 7.4 per cent, the reduction in male certifications has been 29.4 per cent. and this has been offset by an increase in the female certifications. This rise is almost entirely confined to the age group 70 years and over. In males this age group also shows a slight increase, there being at the same time a fall in all the other age groups.

SCHOOL HEALTH SERVICE.

Health teaching has rapidly expanded and now 16 doctors are employed part-time in this duty in addition to the full-time school

medical officer/health visitor teams. Ten primary, thirty secondary, six special and two approved schools are so far receiving talks as well as three colleges of further education. This, of course, is in addition to the periodic visits made primarily for the purpose of medical supervision.

The consultant surgeon to the service remarks in his section of the Report on the increasing number of children suffering from spina bifida. These children indicate a problem that the education departments may well be facing in the future in catering for their education. Many of them are intelligent and as a result of modern therapy can now be taught to walk with, of course, suitable aid. It is anticipated that every year approximately 40 cases of spina bifida with paralysis will be accepted into the educational system. The design of future comprehensive schools should take this into consideration.

The cleanliness of school children has given some concern during the year. Despite the constant attention which has been given to this matter cleanliness of heads does not improve and it is found that in many cases reinfestation occurs within a very short time. In the case of boys over 4 per cent. of the 13-year-olds were found to have nits in their hair and in girls 12 per cent.

The Chief Dental Officer reports an upward trend in advanced dentistry and also an increase in the general work of the dental clinics.

During the year the usual five-yearly survey of housing information relating to children in specific age groups was obtained at the routine medical examinations in school by medical officers and the details appear in this Report.

FOOD INSPECTION.

This year marks the tenth anniversary of the passing of the present Food and Drugs Act and during these years some 75 pieces of legislation pertaining to food have reached the Statute Book. It is gratifying to find that despite this the percentage of samples failing to comply with the required standards did not rise as might have been expected but remained at just over 2·5 per cent. Out of a total of 4,485 samples, only 2·4 per cent. of the formal ones and 2·8 per cent. of the informal ones were reported as non-genuine. Of the 33 formal samples so found, 22 cases were taken to court and a conviction was obtained in each case. They all related to excess of preservative, in each case sulphur dioxide.

The results of milk sampling were favourable, even although with the alteration in the grades the tests are more stringent. The percentage of failures on the top grade fell from 42·5 per cent. to 36·4 per cent. At the same time there was an increase, however, in the second grade failures from 14·7 per cent. last year to 21·2. It is of interest to note that more and more milk is being sold in cartons.

A disappointing feature which is still with us is the unsatisfactory state of many samples taken from milk dispensing machines, the percentage of failures still being slightly more than 50 per cent. in respect to the coliform test. This is a problem which continues to exercise the Food and Drugs Section but it is hoped that a solution will not now be long delayed.

The number of registered dealers in ice-cream showed a reduction of 22 and during the summer months inspection of ice-cream vehicles was again continued at week-ends, especially on Sunday afternoons and an improvement was noted, infringements where they occurred being for the most part of a technical nature.

Pasteurised liquid whole hen egg produced in the two City breaking-out plants was satisfactory. In no case were any *Salmonella* isolated and the eggs used were principally home eggs.

There were nineteen samples of desiccated coconut examined for the presence of *Salmonella*, with negative results.

This year again showed a decrease in the number of vehicles registered under the bye-laws for regulating street trading, both in respect of those with storage facilities within the City and those where the storage facilities were outwith the City.

The Senior Food Inspector comments with regard to the Food Hygiene Regulations that the progress, if slow, has been sufficiently apparent to attract public comment although much remains to be done. Classes on food hygiene conducted by the Extra-Mural Studies Department of the University continue to be attended to capacity and most of the students attending sit the examination for the Diploma.

THE CITY LABORATORY

We are indebted to Dr. T. F. Elias-Jones, the Director of the City Laboratory, for the report. The City Laboratory is under the administration of the Western Regional Hospital Board.

The Director comments that although the year has been without any particular highlights, it has nevertheless been a busy one. For the second year in succession *C. diphtheriae* has not once been isolated and although unusually large numbers of examinations for enteric infections have been undertaken in the previous two years, the numbers in 1966 dropped to average levels. *S. typhi* was isolated on ten occasions, two from immigrant patients and eight from previously known carriers.

In connection with food poisoning, the Director makes a valuable comment emphasising the difficulties in dealing with outbreaks in that all too often by the time the victims have developed symptoms, none of the suspected food is available for examination and that a great deal of diligent searching is often necessary to produce even the merest morsel for examination. It is, however, most rewarding when such a morsel can be found and the source of the infection traced.

In past years antenatal blood specimens found to be Rhesus negative have all been referred for antibody tests to the Regional Blood Transfusion Centre. This procedure has now been altered and all blood samples received for grouping are dealt with in their entirety in the Laboratory. Dr. Elias-Jones records in his report his thanks to Dr. John Wallace, the Director of the Regional Blood Transfusion Centre for his support in these matters.

WELFARE SERVICES.

The Senior Welfare Services Officer in his report notes that during the year the third senior occupational centre was opened at Pollokshields Hall to provide accommodation for 60 girls. This hall which was taken over from the Halls Department, is used as an occupational centre during the day and for public functions in the evening. It has eased considerably the transport problem for trainees residing in the south side of the City.

The work at Foresthall continues unabated, and it is interesting to note that the report refers to the transfer of 144 persons from residential accommodation to the hospital section and the transfer of 100 from the hospital section to residential accommodation. This emphasises the most satisfactory and happy relationships that exist between the two sides of the institution.

Crookston Home was utilised during the year to the full, but it would appear that the number of frail residents is steadily increasing. This is perhaps most noticeable in the drop in the use of outside amenities such as bowling and putting.

During the year work was started on the building of an extension to contain change and rest rooms for non-resident staff and also waiting room, interviewing room and toilet accommodation.

Frognal Home at Troon continues to enjoy the interest of local organisations, and their kindness and hospitality is greatly appreciated.

With regard to the 19 small homes which were fully occupied during the year, the installation of lifts in homes which have been extended has increased the accommodation for persons who would otherwise only have managed on the ground floor.

The Department's thanks are again due to Professor Ferguson Anderson and his team of physicians for their interest and help.

At Laurieston House voluntary organisations which cater for a wide range of handicaps have continued their excellent social work which has enabled many physically handicapped to lead a fairly full life.

A highlight of the year for the physically handicapped was a Christmas shopping expedition arranged by the courtesy of Lewis's Stores in Argyle Street. The management kept their store open one evening for the benefit of the disabled at a time when the general public were excluded from the building. This venture was greatly appreciated and its success was in no small measure due to the work of various organisations.

The three family case-work units set up in 1965 continue to function effectively. The demand for their services has increased, but owing to the shortage of suitably qualified social workers it has been found necessary to limit the number of cases dealt with by each worker.

I wish to take this opportunity to thank the Convener and members of the Health and Welfare Committee for their support and encouragement during the year. I would like also to thank the members of the staff for their assistance in the preparation of this Report and in particular Miss Knox, the Department's Librarian, for undertaking the collating and arranging of the material.

ARCHIBALD R. MILLER.

SECTION I

POPULATION, ETC.

The Registrar General's estimate of the City's population, as at 30th June, 1966, was 979,798, a decrease of 21,059 from the 1965 mid-year estimate.

Although there were fewer deaths in 1966 there was also a marked decrease in the number of births and in consequence the Natural Increase (excess of births over deaths) was smaller than in 1965. For the first time since 1955 this figure was less than 8,000. The following table shows the variation since 1955 :—

NATURAL INCREASE (*for Calendar year*).

1955 ...	... 7,748	1959 ...	... 9,062	1963 ...	... 8,901
1956 ...	... 8,691	1960 ...	... 10,055	1964 ...	... 10,128
1957 ...	... 9,236	1961 ...	... 9,474	1965 ...	... 8,086
1958 ...	... 9,306	1962 ...	... 10,267	1966 ...	... 7,325

In the period July, 1965 to 30th June, 1966, the natural increase was 7,231, a figure which if added to the estimated mid-year population in 1965, of 1,000,857, would have given in 1966 a population of 1,008,088. According to this estimate, therefore, there has been an actual loss of 28,290 persons from the City during this period. From information supplied by the Registrar General, this loss can be accounted for—partly by emigration abroad and by migration outwith the City, some to other areas of Scotland and the United Kingdom but chiefly into the adjacent counties. In 1966, the estimated net migration loss was some 28,500 persons. Of this number, 51 per cent. went to other parts of Scotland, 22 per cent. elsewhere in the United Kingdom and 27 per cent. overseas.

In 1965, 56 per cent. of the migration loss was to other areas in Scotland, 21 per cent. to other parts of the United Kingdom and 22 per cent. overseas.

This considerable loss of population is, in part, confirmed by the reduction in the number of persons in the Voter's Roll between October, 1965 and February, 1966, a decrease of 14,696. On a ratio of population to voters based on the latest Census this represents a population loss of some 22,400 persons.

It should be noted that in this Report, as in 1965, the various rates have been calculated on the *mid-year* population and not on the December estimate as in previous years.

Ward Population.—Details of the population in each ward of the City are given in Appendix Table I and the distribution of the population in the five administrative divisions of the City is shown in Section XV—General Sanitary Administration, page 364. Ward populations are based on the Census ratio of population to local government electors as changes in the electoral register provide as accurate an index as any of the movement of population between wards.

There is great variation in population size throughout the 37 wards, ranging from 10,169 in Exchange ward to 84,175 in Provan where extensive housing development has taken place in recent years.

The only ward with a population which may be regarded as near the average of all the wards is Langside (26,008). Twenty-six wards had smaller populations than this and in fifteen of these the population was less than 20,000.

Of the ten wards with larger populations, Cathcart (64,840), Knightswood (52,750), Pollokshaws (47,727), Ruchill (42,419) and Shettleston and Tollcross (42,223), are, like Provan, wards on the periphery of the City where much housing development has taken place within recent years.

Institutional Population.—On 30th June each year a special Census of persons resident in hospitals and institutions, hotels, etc., is taken by the district inspectors and in 1966 this population totalled 23,711, a decrease of 107.

The largest institutional population (3,274) was in Exchange Ward where most of the City's hotels are located. Of the 2,186 persons in Pollokshields Ward more than half were resident in Leverndale Hospital, 462 in Crookston Home and the remainder distributed throughout the many nursing homes and residential homes (for children and for aged persons) which are a feature of this area. Robroyston and Stobhill Hospitals together account for most of the 1,887 persons in Springburn Ward. Kelvinside Ward (1,743) has, in addition to the three hospitals, several hotels in this area and a growing number of residential homes for aged persons. Provan Ward, where Barlinnie Prison and Gartloch Hospital are located, had an institutional population of 2,241.

The main Glasgow Hospitals are distributed throughout the City as shown in the following table :—

LOCATION IN WARDS OF THE VARIOUS GLASGOW HOSPITALS AND THE
NUMBER OF PERSONS RESIDENT THEREIN AS AT 30TH JUNE, 1966.

Ward				Hospital				Persons Resident
2.	Parkhead	...	...	Belvidere	...	...	...	474
7.	Provan	...	...	Gartloch	...	...	...	902
9.	Springburn	...	...	Stobhill	...	...	...	1,239
				Robroyston	...	...	...	553
10.	Townhead	...	...	Royal Infirmary	...	...	...	1,107
				Eastern District	...	...	...	264
11.	Exchange	...	...	Royal Maternity	...	...	...	358
				Ophthalmic Institute	...	...	...	27
12.	Anderston	...	...	Ear, Nose and Throat	...	...	...	89
				Queen Mother Hospital	...	...	...	246
				Royal Hospital for Sick Children	...	...	...	*
13.	Park	...	...	Eye Infirmary	...	...	...	102
				Royal Beatson Memorial	...	...	...	88
15.	Woodside	...	...	R.H.S.C., Oakbank	...	...	...	307
16.	Ruchill	...	...	Ruchill	...	...	...	465
18.	Maryhill	...	...	Eastpark Home	...	...	...	60
19.	Kelvinside	...	...	Gartnavel	...	...	...	840
				Homeopathic	...	...	...	25
				Redlands	...	...	...	141
20.	Partick East	...	...	Western Infirmary	...	...	...	971
23.	Yoker	...	...	Knightswood	...	...	...	258
				Blawarthill	...	...	...	50
24.	Knightswood	...	...	R.H.S.C. Drumchapel	...	...	...	94
30.	Fairfield	...	...	Shieldhall	...	...	...	131
				Elder Cottage	...	...	...	22
				Southern General	...	...	...	912
				David Elder	...	...	...	86
32.	Pollokshields	...	...	Leverndale†	...	...	...	1,181
34.	Pollokshaws	...	...	Darnley	...	...	...	70
				Cowglen	...	...	...	105
35.	Govanhill	...	...	Samaritan	...	...	...	152
36.	Langside	...	...	Victoria Infirmary	...	...	...	587
								<u>11,906</u>

* Now at Oakbank.

† Formerly known as Hawkhead.

Two changes will be observed in the preceding table, the transfer from Ward 12 to Ward 15 of the Royal Hospital for Sick Children and the addition, in Ward 34, of another hospital (Cowglen).

The former hospital, at Yorkhill, was closed in January, 1966, following the discovery of structural defects which had developed in certain wards, and the patients removed to Oakbank which will provide alternative accommodation until the hospital at Yorkhill is rebuilt.

Although not officially opened till October, 1966, the first patients were admitted to the new hospital at Cowglen, in April. This former military hospital is intended to provide accommodation for 194 geriatric and 50 young chronic sick patients. At 30th June, 1966, the hospital population (including staff) was 105.

These changes are reflected in the increase in institutional population in the Woodside and Pollokshaws Wards and the decrease in Anderston Ward. In this ward, too, there was an additional decrease of 506 persons, due to the closure of two common Lodging Houses.

Changes in the other wards were of little significance, almost all being due to fluctuations in hotel and hospital population.

The institutional population, as at 30th June, 1966, was accommodated as follows :—

	1966	1965
General Hospitals	2,673	2,737
Infectious Diseases Hospitals	939	1,036
Mental Hospitals	2,923	2,841
Sanatoria and Others	5,496	5,286
Nursing Homes	412	413
Children's Homes	185	296
Hotels and Guest Houses	4,093	4,058
Hostels	881	951
Homes for Aged Persons	1,758	1,711
Common Lodging Houses	1,110	1,307
Special Institutions	3,241	3,182
Total	<u>23,711</u>	<u>23,818</u>

Acres.—The area of the City remains unaltered at 39,725 acres. The following table shows the progress of the City's expansion since the beginning of the century :—

	Acres
1901	12,681
1911	12,975
1921	19,183
1931	29,511
1951	39,725

The 37 wards of the City vary considerably in size, from the smallest, Woodside, with 170 acres, to Provan with 4,846 acres. Cowcaddens, Woodside and Gorbals are the only three wards which have remained unchanged in area throughout the various extensions to the City and alterations in ward boundaries which have taken place since the wards were first "recast" in 1920.

Density.—The average density of the City fell from 25 in 1965 to 24 persons per acre in 1966. Three of the oldest wards of the City, Townhead, Gorbals and Woodside, were till recently the most densely populated, with densities well above the other 34 wards. The redevelopment of the most congested areas in these wards has resulted in a marked reduction in their density. In 1965, the density of Gorbals Ward was reduced to the same level as that of North Kelvin (74). In 1966 density in this ward (72) was higher than in both Gorbals and Townhead Wards. The progressive reduction in the density of these wards over the past forty years or so is shown as follows :—

			Woodside	Gorbals	Townhead
1921	...	...	222	207	171
1931	...	...	195	186	156
1951	(Census)	...	158	145	116
1961	(Census	...	116	93	88
1962	...	...	113	87	86
1963	...	...	107	83	85
1964	...	...	98	78	83
1965	...	...	86	74	79
1966	...	...	79	68	66

While the density of the City as a whole at the 1961 Census (26·5 persons per acre) showed little change from that of 1951 (27·4) the extensive housing developments in three wards, Provan (Easterhouse), Knightswood (Drumchapel) and Cathcart (Castlemilk) materially increased the density in these areas. There was a slight increase in the density of both Cathcart and Provan in 1966, but no change in Knightswood.

			Persons per acre		
			1966	1961	1951
Provan	...	...	17	16	5
Knightswood	...	...	33	33	11
Cathcart	...	...	24	23	8

Occupied Houses.—A return of occupied and unoccupied houses (including inhabitant occupiers) as at Whitsunday of each year is compiled by the City Assessor and the following analysis is based on the information given in this return.

There was another decrease, but smaller, in the number of occupied houses in 1966, the total for this year, 317,715, being 784 fewer than in 1965.

This is, of course, the *net* change from 1965. In fact there was a reduction of 4,526 houses among 18 wards, offset by an increase of 3,742 in the other 19. These increases ranged from six in Knightswood to 678 in Craigton. Other increases were 610 in Provan, 597 in Maryhill, 292 in Dennistoun and 250 in Kelvinside.

Wards with fairly large decreases, mainly due to closure and/or demolition of unfit houses, were Cowcaddens (697), Townhead (678), Gorbals (513), Anderston (499) and Mile End (410).

The number of occupied houses in the City according to size is as follows :—

				1966	Compared with 1965		
One apartment	...	...		25,121	Increase	...	477
Two apartments	...	...		84,855	Decrease	...	2,278
Three apartments	...	...		118,818	Increase	...	1,621
Four apartments	...	...		64,215	Decrease	...	281
Five apartments and over	...			24,706	Decrease	...	323
				<u>317,715</u>	Decrease <u>784</u>		

The increase in the number of (occupied) one-apartment houses is, of course, the *net* total for the City. No less than twenty-four wards showed some increase in the number of occupied one-apartment houses, from three in Pollokshaws to 297 in Park. The unusually large increase in this ward is almost wholly due to subdivision of the larger type of house (six apartments and over) and the creation of "multiple occupancies". Most of the increase in other wards is new housing provided for single and aged persons, an instalment of the linings passed by the Dean of Guild in the past two years (as detailed in Appendix Table III). With the advent of these flats, specially designed for single and aged persons, the category of "one-apartment house" is no longer synonymous with a "single end" (a single apartment in a tenement property) but may also refer to a service flat or the accommodation for an aged or single person.

The decrease in occupancy of the older type of one-apartment house was 592 in all (this figure takes no account of the increase of 155 in the unoccupied one apartments.)

The distribution of the 25,121 occupied one-apartment houses throughout the 37 wards ranges from 149 in Langside to 2,231 in Dalmarnock with the greatest concentration in the older parts of the City. Six wards in all have over 1,000 of this type of house.

The following table shows the total number (*occupied and empty*) of one-apartment houses in these seven wards with the relative proportion of houses of all sizes in each.

	Number	As percentage of houses of all sizes
Dalmarnock	2,495	24.1
Hutchesontown	1,105	22.9
Mile-End	1,673	18.3
Calton	1,063	17.5
Cowlairs	1,269	16.0
North Kelvin	1,344	15.9
Shettleston and Tollcross ...	1,172	8.8

Unoccupied Houses.—At Whitsunday, 1966, there were 8,157 houses unoccupied compared with 7,583 in 1965, an increase of 574.

The increase in 1966 affected all but houses of 4 apartments and over, but was most noticeable in those of two apartments.

NUMBER OF EMPTY HOUSES.

	1966	1965	1964	1963	1962	1961	1960	1959
One apartment	2,026	1,871	1,418	1,209	1,135	1,111	1,057	947
Two apartments	3,572	3,080	2,569	1,693	1,445	1,427	1,445	1,258
Three apartments	1,276	1,159	1,005	882	655	628	642	564
Four apartments	621	707	596	526	497	492	507	486
Five apartments and over	622	766	709	636	630	677	705	712
	<u>8,157</u>	<u>7,583</u>	<u>6,297</u>	<u>4,946</u>	<u>4,362</u>	<u>4,335</u>	<u>4,355</u>	<u>3,967</u>

This total of 3,572 two-apartment houses is equivalent to 44 per cent. of all the unoccupied houses in the City, a larger proportion than in 1965. Since 1957, the proportion of unoccupied two-apartments has remained very steady, at 32 per cent. from 1957 to 1959 and 33 per cent. from 1960 to 1962. In 1964, however, there was a sharp increase to 41 per cent. at which level it remained in 1965.

Only a small proportion (8.1 per cent.) of the unoccupied houses were houses of five apartments and over compared with 10.1 per cent. in 1965. Townhead again had the greatest number of empty houses, 607, compared with 543 in 1965, but only 11 were of five or more apartments. Wards in which 30 per cent. and over of the empty houses were of five apartments and over are shown in the following table :—

NUMBER OF EMPTY HOUSES.

			Total	Five Apartments and over	Percentage
Pollokshields	...	...	127	65	51
Park	...	...	340	101	30
Partick East	...	...	248	102	41
Kelvinside	...	...	174	52	30

Dean of Guild Linings.—During the year ended 31st August, 1966, 3,400 linings were granted compared with 5,123 in 1965. Details of the number and size of house for which these were granted are given in Appendix Table III, with a comparison of the figures for the preceding years from 1919. Of the total linings granted, 2,163 were for three-apartment, 88 for four-apartment, and 10 for five-apartment. Accommodation for single and aged persons is to be provided by 209 single and 930 two-apartment houses distributed widely throughout the City.

METEOROLOGY.

Weather conditions in 1966 were on the whole more favourable than in some previous years. There was no great variation in temperature from the seasonal average and the cold spells were not unduly severe or prolonged.

The first three months were comparatively mild, but April was cold. Temperatures thereafter rose steadily into the 70's at the end of May, and after some cooler weather in June, to over 80°F. in the third week of July, the warmest for some years.

Temperatures remained in the 60's throughout August and most of September but frost in October heralded the approach of winter and the last two months were cold with snow and sleet showers. Rainfall was heavier than in 1965 and there was greater variation in its distribution in the individual months. Most of the increase was in the last quarter of the year and heavy rain in December caused flooding in some parts of the City. Although the total amount of sunshine was less than in 1965, March, May and July were sunnier than usual. June was unusually dull, and January, February and April had a succession of sunless days.

TEMPERATURE.

There was an improvement in the mean temperature in 1966, 46.3°F. compared with the unusually low figure of 45.3°F. in 1965. The 1966 figure is still below the average of the previous ten years, 1956/65—

47.0°F. A rise in mean temperature was observed in all the months, except April and October, both of which had lower temperatures than in the previous year.

The lowest mean temperature was that of January, 35.2°F., slightly higher than in 1965 (34.9°F.) but 0.4° below average. The highest maximum was 53.1°F. on 29th; the lowest minimum 19.0°F. on the 18th.

February too had a higher mean temperature this year, 37.3°F. compared with 36.5°F. in 1965, only 0.2° less than the average. The highest maximum was 54.0°F. on the 5th and the lowest minimum, 21.9°F. on the 15th.

Mean temperature in March, 43.2°F. was the highest for this month since 1961 (45.9°F.) and five degrees higher than in 1965. It was also 1.1° above the month's average. The highest maximum was 55.9°F. on the 15th; the lowest, 28.9°F. on the 25th.

April was colder than usual, the mean temperature 40.9°F. being the lowest since records began in 1920 and 2.7° below the average. This is 4° below the 1965 figure of 44.9°F. The highest maximum temperature was 64.0°F. on the 30th and the lowest minimum 26.1°F. on the second.

Temperatures of 70°F. and over were recorded on the first of May and in the last three days. The mean temperature, 50.6°F. was not unlike that of 1965 (50.1°F.) and 0.3° below average. The highest maximum 75.0°F. was recorded on the 31st and the lowest minimum, 36.0°F. on the 7th.

June had a mean temperature of 56.5°F., 1° higher than in 1965, and 0.1° above average. The highest maximum was 71.1°F. on 29th and the lowest minimum 44.1°F. on the 29th.

Warmer weather followed in July with temperatures between 70° and 75° from the 18th to 20th. On the 21st, Glasgow had its warmest day since June 1957 when a temperature of 83°F. was recorded at the City Weather Centre. Mean temperature for the month was 57.6°F., 0.7° less than average but higher than in 1965 (54.1°F.). The lowest minimum, 46.1°F. was recorded on the 17th, 25th and 27th.

Mean temperature in August (55.5°F.) was very similar to that of 1965 (55.1°F.) but 1.5° below average. The highest maximum, 71.1°F. was recorded on the 18th and the lowest minimum 41.0°F. on the 15th and 25th.

September's mean temperature 54.3°F. was higher than in 1965 (52.6°F.) but very similar to that of 1964 (54.1°F.). It was only 0.3°F. above average. The highest maximum was 64.0°F. on the 2nd, 3rd and 19th and the lowest minimum 43.0°F. on the 23rd.

October had a mean temperature of 46.5°F. compared with 48.5°F., 0.7° below average. Only one other October since 1960 (1964 with 46.7°F.) has had a mean temperature of less than 48°F. The highest maximum was 59.0°F. on 12th, the lowest, 30.9°F., on the 24th and 28th.

Although the mean temperature for November (39.6°F.) was higher than in 1965 (36.9°F.), it was less than average by 1.3°. The highest maximum was 50°F. on the 14th and 15th; the lowest (26.1°F.) on the 3rd and 11th.

December's mean minimum temperature (38.1°F.) was the highest since 1959 (40.2°F.) and higher than in 1965 (36.2°F.). It was, however, slightly below the average for the month (by 0.2°). The highest maximum was 51.1°F. on the 17th and the lowest minimum 24.1°F. on the 25th.

RAINFALL.

There was more rain in 1966 than in the three previous years, and the total 43.66 inches is similar in amount to that recorded in 1962 (43.35 inches). This is 2 inches more than the 1965 total and above the average for the previous ten years (40.30 inches). Only one year (1961 with 46.26 inches) had a heavier rainfall and only 1962 (43.35 inches) had one very similar. Unlike 1965 the rainfall was almost equally divided between the first and second halves of the year, the last quarter being the wettest of the four. The distribution of the rainfall in each of the four quarters of the years 1960 to 1966 is compared with the average for the period 1950/59 in the following table :—

			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
1966	...	...	9.29	11.91	10.04	12.42	43.66
1965	...	...	8.08	9.89	12.57	10.98	41.52
1964	...	...	5.12	10.17	11.35	10.30	36.94
1963	...	...	5.90	9.94	9.62	12.16	37.62
1962	...	...	11.32	6.23	16.37	9.43	43.35
1961	...	...	10.18	6.68	15.40	14.00	46.26
1960	...	...	8.94	8.64	10.65	13.09	41.32
1950-59	...	...	84.0	7.15	12.54	12.16	40.25

The first quarter was the driest, with 9.29 inches, but not so dry as in 1965 (8.08 inches). Almost half of this total was recorded in February which had 4.10 inches rain (on 17 days) in contrast to 1965

when this month had been exceptionally dry (0·77 inches on 6 days). March too, was wetter this year with 3·06 inches (on 21 days) compared with 2·53 inches (on 16 days) in the previous year. January on the other hand had only 2·13 inches. (on 11 days) half the 1965 total and only 50 per cent. of the average for this month. June was wet with a rainfall of 5·75 inches (on 20 days) almost half the second quarter's total (11·91 inches) and two inches more than in 1965. Thunderstorms occurred on three successive days in the third week. Although April had 16 wet days and May 19, the total rainfall in each month was exactly the same, 3·08 inches. In 1965 their respective totals were 3·49 inches on 18 days and 3·35 inches on 17 days. In the third quarter August and September had somewhat similar amounts of rain, 4·28 inches (on 17 days) and 4·11 inches (on 16 days) in contrast to 1965. August in that year had been unusually dry with only 3·43 inches (on 18 days) while September, with 5·51 inches (on 18 days) had been wetter than usual.

The Glasgow Fair Holiday month of July was unusually dry with only 1·65 inches (on 15 days) compared with 3·63 inches (on 13 days) in the previous year. From the 14th to the 22nd there was at most only a trace of rain on one or two occasions. Since 1955 when there was only 1·23 inches rain in this month, there has been only one other year, 1964, with 1·82 inches) when the rainfall was less than 2 inches. In 1956, 1958) and 1959 total rainfall in this month was over 5 inches. The variations since 1920 in this month's rainfall are shown in the following table :—

RAINFALL IN THE MONTH OF JULY.

			Amount in inches				Amount in inches
1920-29 (average)	...		3·57	1961	...	...	2·99
1930-39	„	...	3·92	1962	...	...	3·04
1940-49	„	...	3·25	1963	...	...	2·18
1950-54	„	...	4·40	1964	...	...	1·82
1955-59	„	...	4·33	1965	...	...	3·63
1960	...	...	4·07	1966	...	...	1·65

Almost half the rainfall recorded in the last quarter of the year (12·42 inches) fell in December which had 26 wet days and 5·37 inches rain. This is very similar to the 1965 figure of 5·10 inches (on 25 days) and above the average for this month. One of the wettest days was the 17th when 1·20 inches of rain were recorded.

The 3·45 inches rainfall in October was distributed over 19 days while the heavier fall in 1965 (3·69 inches) was concentrated in 15 days. More than one inch of rain (1·17 inches) fell on the 5th of the month. November had less than its average amount of rainfall 3·60 inches (on 19 days) but more than in 1965 (2·19 inches on 15 days).

Snow and sleet showers were experienced from January to April (on 7 occasions in this last month) and again in November and December.

Snow was lying on 11 mornings in February.

SUNSHINE.

There were 1,151 hours of sunshine in 1966, 39 less than in 1965 and less than the average (1,192) for the preceding ten years 1956/1965.

Seven months had more than their average amount of sunshine, August only slightly more, while the other five had less, June quite markedly so.

May was the sunniest month with 205·1 hours' sunshine (147·6 in 1965). In only one other year since 1960 has there been an equally sunny May (1963 with 202·1 hours). This, and the 1966 total were well above the average for this month. July's total (201·7 hours) was also above average and the month was sunnier than in 1965 (154·5 hours). Since 1925 there have been only other four years (1934, 1935, 1952 and 1955) in which the sunshine total for this month was over 200 hours. August had 129·7 hours' sunshine, less than in 1965 (140·2 hours), but near the average for the preceding five years (128·9 hours). March (118·1 hours) the only other month with more than 100 hours' sunshine, had 20 hours more than in 1965 (87·4 hours). Since 1950 there has been only one sunnier March, 1955 with 119·8 hours. June, usually a sunny month, was very dull, with only 86·5 hours' sunshine. The daily mean was only 2·88 hours bright sunshine (49 per cent. of average). Since departmental records began (in 1925) there has been only one other very dull June, 1958 with 106 hours. The 1965 total for this month was 140·9 hours and the average for the preceding five years, 1960/64, 175·9 hours. The September total 88·7 hours, was higher than in 1965, 68·4 hours, but below the average for the period 1960/64 (108·5 hours). The last five days of this month were quite sunless. January was the dullest month of the year with only 26·3 hours' sunshine, little more than half the 1965 figure of 51·6 hours. There was no sunshine on 19 days of this month, the dullest January since 1951 (23·1 hours). December too had less than 30 hours' sunshine (28·1 hours,) none at all being recorded on 15 days. The month was much duller than in 1965 (43·0 hours) and the total sunshine less than the average for the previous five years 1960/65 (31·4 hours). February had only 32·3 hours' sunshine compared with 62·3 hours in 1965. Since 1939 (32·9 hours) there has been only one other equally dull February (1959 with 22·3 hours.) This month's average for the five years 1960/64 was 70·7 hours. There was no sunshine on 9 days of the first fortnight. April too had a sunless spell lasting nine days and the sunshine total for the month

(97·8 hours) was well below the 1960/64 average (128·5 hours). It was the duller April since 1961 (77·3 hours). In 1965 this month had been unusually sunny with 155·7 hours' sunshine.

October had 75·0 hours' sunshine, rather more than in 1965 (65·4 hours) and above the 1960/64 average of 71·2 hours. The total for November (61·8 hours) was less than in 1965 (73·3 hours) but still well above, not only the 1960/64 average (43·8) but the average for the ten years 1950/59 (38·8 hours).

Although there was some misty, foggy weather in January and in the Autumn months the only occasion on which it was at all thick or persistent was in mid-December.

Up to and including November, 1965 the daily readings from which these weather notes were compiled were based on observations made at Springburn Park and published daily in *The Glasgow Herald*. Since 1st December, 1965, the daily readings have been those recorded at the Meteorological Station at Renfrew Airport, a site more representative of the area than Springburn Park which is higher than many of the surrounding districts. This difference is most obvious in the case of temperature, a variation of several degrees being frequently observed in the readings taken at Renfrew and those recorded at the City Weather Centre.

This year's notes, however, have been compiled from the monthly weather reports of the Meteorological Office which provides information additional to that shown on Appendix Table IV on page 401. The readings referred to continue to be those taken at Springburn.

SECTION II

VITAL STATISTICS.

The following is a summary of the principal vital statistics of the City :—

SUMMARY.

	1966	1965	1964	1963	1962
Population	979,798*	1,000,857*	1,018,582*	1,029,147	1,044,500
Acreage	39,725	39,725	39,725	39,725	39,725
Persons per acre	24	25	26	26	26
Number of Inhabited Houses	317,715	318,499	320,316	321,655	325,079
Deaths—Number registered	12,731	13,507	13,086	14,536	13,937
Deaths—After correction for Transfers	12,441	12,761	12,277	13,717	13,224
Births—Number registered	21,799	23,213	23,467	22,349	23,321
Births—After correction	19,766	20,846	22,405	22,618	23,491
Death rate per 1,000 living —All causes	12·7	12·7	12·1	13·3	12·7
Birth rate per 1,000 living	20·2	20·8	22·0	22·0	22·5
Deaths under One Year— After correction	598	587	641	722	762
Deaths under one Year per 1,000 births	30	28	29	32	32
Neonatal death rate—Per 1,000 live births	18·9	17·8	18·4	19·2	21·1
Stillbirth rate per 1,000 births (live and still)	20	20	19	21	22

Particulars of the causes of mortality together with the rates are given in Table VII in the Appendix, and the age and sex distribution in Table VIII.

* Midyear population.

BIRTHS.

There was a noticeable decrease in the number of births registered in 1966, 19,766 compared with 20,846 in 1965 and 22,405 in 1964. This total is the lowest yet recorded. The following table shows the trend since 1930 :—

1930-39 (Average)	22,238	1962	23,491
1940-49 (Average)	21,941	1963	22,618
1950-59 (Average)	21,234	1964	22,405
1960	23,092	1965	20,846
1961	22,842	1966	19,766

The birth-rate fell from 20·8 per 1,000 of the population in 1965 to 20·2, the lowest rate since 1955 (19·5).

Male births formed 51·6 per cent. of the total compared with 51·4 in 1965 and 51·6 in 1964.

Provan again had the greatest number of births, 1,106 compared with 1,118 in 1965. Cathcart with 1,037 was the only other ward to have more than 1,000 births. The highest ward birthrates, however, were those of North Kelvin (37·6), Kingston (35·0), Dalmarnock (34·9), Mile End (34·3) and Hutchesontown (34·1).

Craigton continues to have the lowest birthrate of all the 37 wards. The rate, 11·0 was higher than that of the previous year (9·7) but still below that of any other ward. Other low rates were those of Yoker (12·1), Knightswood (13·5) and Provan (13·5).

For several years now attention has been drawn in these reports to one result of the low birthrates in certain wards—an excess of deaths over births. This adverse trend was first observed in Kelvinside, Langside and Camphill wards in 1949 and in Yoker and Craigton in 1955. Since 1959 Kelvinside, and Langside since 1962, have consistently had a favourable balance of births over deaths and were, therefore, excluded in 1965 from the table below. This year, however, as a result of a decrease in the number of births and an increase in the deaths, Kelvinside has again qualified for inclusion. There has been an increasing improvement in the situation in Camphill, the result of an increase in the births combined with fewer deaths than in 1965.

		1966		Decrease (except where indicated by *)						
		Births	Deaths	1966	1965	1964	1963	1962	1961	1960
Camphill	...	332	294	38*	7*	18*	43	—	5*	1*
Yoker	...	354	428	74	48	25	15	68	39	11
Craigton	...	385	522	137	140	45	90	103	118	97

In Craigton ward an increase in the births was offset by a greater number of deaths than in the previous year, and the situation remained unchanged from the previous year. There has been further deterioration in the situation in Yoker ward where there was a much greater decrease in the births than in the deaths in 1966.

Illegitimate Births.—During 1966, 1,749 illegitimate births were registered compared with 1,606 in 1965 and 1,597 in 1964. This is equivalent to 8·8 per cent. of the total live births as against 7·7 per cent. in 1965 and is the highest rate recorded since 1945 when it was 8·3 per cent. The following table shows the trend in the rate since that year :—

1946-1950 (Average)	5·6	1962	...	...	6·1
1951-1955 (Average)	4·9	1963	...	...	6·6
1956-1960 (Average)	4·9	1964	...	...	7·1
1961	...	1965	...	...	7·7
	1966	...	...	8·8	

The highest ward rates were those of Exchange (17·3) and Park (16·0). Dalmarnock and Calton had very similar rates (13·0 and 13·1). Other four wards, Woodside, Gorbals, Anderston and Ruchill had rates of 12·0 or more. The lowest rates were those of Govanhill (4·2) and Camphill (4·5).

A more accurate comparison of the legitimate and illegitimate birth rates is obtained when the calculation is based on the number of women of child bearing ages ; the former on married women of 16 to 44 years of age, and the latter on the unmarried women and widows of 15 to 44. This is given in the following table (the latest available figure being that of 1965) :—

GLASGOW—BIRTH RATES DISTINGUISHING LEGITIMATE AND
ILLEGITIMATE IN CERTAIN YEARS FROM 1881.

(Based on Figures of the Registrar-General).

Year		Number of Legitimate Births	Rate per 1,000	Number of Illegitimate Births	Rate per 1,000
			Married Women 16-44 Years		Unmarried Women and Widows 15-44 Years
1881	...	17,605	293	1,501	22
1891	...	18,304	283	1,553	21
1901	...	22,676	260	1,530	14
1911	...	19,966	229	1,603	14
1921	...	27,790	238	1,922	13
1931	...	21,504	176	1,427	10
1951	...	19,029	134	1,062	9·6
1952	...	19,378	137	961	8·9
1953	...	19,211	136·5	1,021	9·7
1954	...	19,954	141·9	1,023	9·9
1955	...	20,036	142·2	987	9·9
1956	...	20,834	147·4	1,051	10·9
1957	...	21,367	151·0	1,048	11·3
1958	...	21,643	153·2	1,117	12·3
1959	...	21,497	152·6	1,101	12·5
1960	...	21,858	156·5	1,232	14·5
1961	...	21,606	155·6	1,236	15·0
1962	...	22,064	163·0	1,430	17·1
1963	...	21,134	160·2	1,484	17·8
1964	...	20,808	160·9	1,597	19·4
1965	...	19,240	152·3	1,606	20·2

These rates are higher than those for Scotland as a whole. In 1965 the comparable legitimate birth rate for Scotland was 142·6 and the illegitimate 15·5.

MARRIAGES.

There was an increase in the number of marriages in 1965 9,042 compared with 8,809 in 1965 and 8,886 in 1964. This represents a rate of 9·2 per thousand of the population as against 8·8 for the previous year. The following table shows the trend of the marriage rate since 1901 :—

MARRIAGE PER THOUSAND PERSONS LIVING.

1901-1910	...	...	8·8	1956-1960	...	...	9·5
1911-1920	...	...	9·7	1961	...	...	8·9
1921-1930	...	...	8·9	1962	...	...	8·7
1931-1940	...	...	9·7	1963	...	...	8·6
1941-1945	...	...	11·0	1964	...	...	8·7
1946-1950	...	...	9·8	1965	...	...	8·8
1951-1955	...	...	9·6	1966	...	...	9·2

This is still above the rate for Scotland as a whole, 8·1 in 1966 and 7·8 in 1965.

DEATHS.

The number of deaths registered in 1966 was 12,731, a decrease of 776 from the previous year's total. After correction for transfers this total was reduced to 12,441 compared with 12,761 in 1965. In 1966 Glasgow, with 18·9 per cent of the population of Scotland, accounted for 19·5 per cent. of the deaths, a lower proportion than that of 1965 (20·3 per cent.). The rate, which in 1964 had been 12·1, the lowest in ten years, rose again to 12·74 in 1965. In 1966 it fell slightly, to 12·70.

Exchange Ward had a rate of 21·7, the highest of all the 37 wards. Calton had a rate of 16·5 and Camphill Ward, which with only three exceptions since 1950 had the highest death-rate until 1965, came third in 1966 with a rate of 16·1. Other wards with a rate of 15 per 1,000 or over were Parkhead (15·5), Kelvinside (15·4) and Fairfield (15·0).

Nine wards had rates below that for the City, and only one (Mile-end) the same rate (12·7). Provan Ward for the fifth successive year had the lowest rate (8·4) (compared with 7·4 in the two previous years.). Other wards with low rates were Knightswood (8·6), Pollokshaws (9·4), Cathcart (9·6) and Gorbals (9·8).

Age and Sex Distribution.—The decrease in the number of deaths was markedly greater in the females, 5,893 as against 6,138 in 1965. The male deaths totalled 6,548, a decrease of 75 from the 1965 figure. The proportion of male deaths in 1966 was larger, 52·6 per cent. of

all the deaths compared with 51·9 per cent. in the previous year. This proportion has not shown much variation in recent years. The sex and age distribution of deaths according to the International Classification of Causes of Death (Short List) has been taken from the *Registrar General's provisional return* and is shown in Appendix Table VIII.

The age distribution of the deaths as a rate per 1,000 deaths at all ages is given in the table below :—

RATE PER THOUSAND DEATHS AT ALL AGES.

	-4 wks.	-1 yr.	-5	-15	-25	-35	-45	-55	-65	65+	Total
1951	36	28	12	9	16	25	45	98	180	551	1,000
1961	35	18	7	5	7	13	33	88	192	602	1,000
1962	38	20	7	7	8	14	34	89	195	588	1,000
1963	32	21	7	6	7	13	31	84	200	599	1,000
1964	33	19	6	6	9	12	33	89	210	583	1,000
1965	29	17	6	6	9	13	31	83	200	606	1,000
1966	30	18	7	6	9	12	28	83	196	611	1,000

In 1951 8·5 per cent of all the deaths occurred at ages under 15 years and 73 per cent. at ages over 55. In 1966 the relative proportions were 6·1 and 80·6 per cent.

The decrease in the female deaths was almost wholly confined to the age groups 25 years and over with little change at the lower ages.

Among the males the decrease was most apparent at ages 55 to 85.

Over 55 years the male deaths totalled 5,110 in 1966, compared with 5,151 in 1965, while the number of female deaths was 4,921, a decrease of 215.

This is equivalent to 78·0 per cent. of all the male deaths (77·8 in 1965) and 83·5 per cent. of the female deaths (83·7 in 1965).

International Classification of Causes of Death.—The problem of the statistical treatment of joint causes of death is one that successive international conferences since 1900 have endeavoured to solve. As from 1st January, 1964, a new International Medical Certificate has been in use in Scotland and it is already apparent that the information which this was expressly designed to solicit is, in a large number of cases, not correctly stated.

Where the information on the certificate is inconsistent with a causal sequence, or appears incomplete or equivocal, certain selection

rules are applied. It should be emphasised, however, that such rules are arbitrary and cannot constitute a successful substitute for a properly completed certificate or certificates where points of doubt have been clarified by reference to the certifier and this the Registrar General is in a position to do.

This Report has so far as possible made use of the Registrar General's analysis of the cause of death as given in his preliminary statement published in March of each year and supplements this where more detailed information is required, by other statistics compiled by the statistical section of this Department.

A comparison of the Registrar General's and the Medical Officer's classification of Causes of Death was incorporated in Appendix Table VII in the Report for 1963. Since 1964 however, Tables VII and VIII have been based entirely on the Registrar General's figures.

Relative Frequency of the Causes of Death.—A comparison is made in the following table of the commonest causes or groups of causes of death which were together responsible for 86 per cent. and over of all deaths in 1966 and 1965 :—

				1966		1965
				Per cent.		Per cent.
				of all		of all
				Causes	Number	Causes
Heart Disease	...	...	3,850	30.95	3,912	30.65
Malignant Neoplasms	...	...	2,487	19.99	2,620	20.53
Vascular Lesions	...	...	1,797	14.44	1,984	15.55
Bronchitis	...	...	808	6.49	814	6.38
Pneumonia	...	...	652	5.24	533	4.18
Violence	...	...	594	4.77	654	5.12
Congenital Malformations and Diseases of Early Infancy			433	3.48	447	3.50
Pulmonary Tuberculosis	...		95	0.76	140	1.10
				10,716	86.12	11,104
					87.01	

With the exception of Pneumonia, and Violence, the relative frequency of the eight main causes remains unchanged from 1965. As a result of the increase in deaths from Pneumonia in 1966, this cause takes precedence of Violence in the above table where it now ranks fifth.

An analysis of the provisional figures of the causes of death for the whole of Scotland shows the first three causes as above but followed by Violence, Bronchitis, Pneumonia, Congenital Malformations, etc., and Pulmonary Tuberculosis in that order. Together these eight causes account for 84.9 per cent. of the total deaths compared with the City figure of 86.1. Bronchitis and Pneumonia accounted for a much higher proportion of the City deaths, 6.49 and 5.24 respectively as against 4.49 and 4.05 for the country as a whole. Pulmonary Tuberculosis was not among the first eight causes of death in Scotland in 1966 but it is included here for comparison with the City figure; it accounted for only 0.39 per cent. of all the Scottish deaths compared with 0.76 for Glasgow. In the two major groups, Heart Disease and Vascular Lesions, the proportions were lower for the City; for Scotland the respective figures were 33.67 and 16.22. The proportion of City deaths from Malignant Disease, 19.99, was higher than that for Scotland, 18.72. Deaths from Violent Causes formed a higher proportion of the City deaths, 4.77 compared with the Scottish figure of 4.64. Congenital Malformations and Diseases of Early Infancy accounted for 2.77 of all Scottish deaths compared with 3.48 of the City total.

CAUSES OF DEATH.

The following table is a summary of the causes of death as shown in the Registrar General's provisional return for each year (see Appendix Table VII) arranged in the principal groups according to the international Classification adopted in 1950. The rates for each year have been calculated on the *mid-year* population.

SUMMARY OF DEATH RATES PER MILLION FROM PRINCIPAL CAUSES.						1966	1965	1964
General Diseases—								
(a) Infective and Parasitic Diseases						32	22	38
(b) Tuberculosis—								
(1) Respiratory						97	140	136
(2) Non-Respiratory						13	8	9
(c) Malignant (Cancer, etc.)						2,538	2,617	2,464
Diseases of the Nervous System (including Mental Disorders)						1,998	2,176	1,937
Diseases of the Circulatory System						4,377	4,275	4,163
Diseases of Respiratory System (including Influenza)						1,629	1,449	1,310
Diseases of Digestive System						389	358	342
Congenital Defects and Diseases of Early Infancy						443	447	451
Violence						606	654	655
All Other Causes						575	605	548
						<u>12,697</u>	<u>12,751</u>	<u>12,053</u>

Infective and Parasitic Disease.—There were 32 deaths in this group in 1966 compared with 22 in 1965. Of this total, 21 were allotted to the sub-group “ Other Infective and Parasitic Disease ”, an increase of six on the previous year’s figure. The Registrar General (in his Annual Return) groups typhoid fever, scarlet fever, streptococcal sore throat, diphtheria and acute infectious encephalitis with a variety of other infections, such as infective hepatitis, under this one heading. Scrutiny of the Department’s own records (allotting 34 deaths to this miscellaneous group) showed the following :—

An 87-year-old woman from erysipelas.

A 22-year-old man from tetanus.

A 17-year-old girl from acute encephalitis.

Seven deaths from infective hepatitis—four men aged 62 to 69 years, two women aged 71 and 77, and a 13-year-old girl.

There was one death from dysentery (an 83-year old woman), three from measles (children aged eight months, one year and six years) and seven from meningococcal infection (one an infant less than a week old, four under one year and two aged one and five years respectively).

Deaths from Diarrhoea, formerly referred to here, will be found under the heading “ Digestive Diseases ” on page 54.

Tuberculosis.—In 1966, the Registrar General attributed 95 deaths to Pulmonary Tuberculosis, a decrease of 45 from 1965. The rate (calculated on the mid-year population) was 97 per million compared with 140 in 1965 and is the lowest yet recorded in the City. The chart on page 247 (based throughout on the Registrar General’s figures) shows how the rate, which had fallen from 113 per 100,000 in 1948 to 17 in 1961, showed a tendency to rise again in 1962 and 1963.

Male deaths, still three times as many as the female (71 and 24 respectively in 1966) formed a somewhat larger proportion, 75 per cent. of the total deaths than in 1965 (72 per cent.). Only one male death was under 25 years of age and 20 under 55 years. Twenty were under, and 30 over, 65 years. Among the females, more than half the deaths (15) were at ages 25 to 54 and the remaining 9 over 55 years. There were no deaths under 25 years.

The following table shows the age distribution of the deaths attributed to Pulmonary Tuberculosis by the Registrar General (stated as a percentage of the total).

MALES—	- 15	- 25	- 35	- 45	- 55	- 65	65 +	All Ages
1951	... 2.2	9.4	14.2	15.9	20.1	25.3	12.9	100.0
1961	... —	—	3.9	14.1	21.1	22.6	38.3	100.0
1962	... 0.7	0.7	3.5	12.6	16.8	32.8	32.9	100.0
1963	... —	—	—	7.8	17.7	28.1	46.4	100.0
1964	... —	—	1.9	4.9	15.7	35.3	42.2	100.0
1965	... 1.0	1.0	1.0	7.9	15.8	35.7	37.6	100.0
1966	... —	1.4	2.8	5.6	19.7	28.2	42.3	100.0
FEMALES—								
1951	... 6.0	28.5	24.5	18.9	9.7	6.4	6.0	100.0
1961	... —	—	20.4	24.1	20.4	16.6	18.5	100.0
1962	... —	2.5	15.0	25.0	20.0	17.5	20.0	100.0
1963	... 1.8	1.8	13.0	27.8	16.6	20.4	18.6	100.0
1964	... —	—	16.2	21.6	29.8	8.1	24.3	100.0
1965	... —	—	2.6	23.1	28.2	10.2	35.9	100.0
1966	... —	—	12.5	29.2	20.8	20.8	16.7	100.0

This sex difference in the age distribution of mortality from the pulmonary form of the disease should be compared with the following table in which the rates for each sex and age group are based on the respective Census populations :—

PULMONARY TUBERCULOSIS :

RATES PER THOUSAND POPULATION IN EACH AGE GROUP.

	- 15	- 20	- 25	- 35	- 45	- 55	- 65	65 +	All Ages
MALES—									
1930-32 ...	0.17	0.95	1.35	1.22	1.54	1.59	1.21	0.76	0.96
1950-52 ...	0.10	0.24	0.73	0.74	0.95	1.36	2.02	1.49	0.82
1960-62 ...	—	—	—	0.09	0.28	0.45	0.99	1.58	0.33
FEMALES—									
1930-32 ...	0.26	1.47	1.41	1.11	0.79	0.62	0.60	0.23	0.75
1950-52 ...	0.12	0.67	1.40	1.08	0.66	0.35	0.39	0.30	0.55
1960-62 ...	0.01	—	—	0.16	0.19	0.15	0.16	0.20	0.10

Deaths from non-respiratory tuberculosis totalled thirteen in 1966, five more than in 1965. Of the five male deaths, one was in the age group 35 to 45 years, and the other four over 55. One of the eight female deaths was an eight-year-old girl, two were aged between 25 and 45, and the remaining five over 55 years. Three deaths were due to abdominal tuberculosis, a 73 year old man and two women aged respectively 62 and 84 years. The young girl died from tuberculous meningitis.

Diseases of the Nervous System :—There were 1,958 deaths in this group in 1966, a decrease of 220 from the previous year. Vascular Lesions which rank third in the list of major causes of death, accounted for 1,797 deaths (91.8 per cent. of all the deaths in this group) compared

with 1,984 (91.1 per cent.) in 1965. Twelve deaths were allotted to non-meningococcal meningitis, one more than in 1965. There was some decrease also in the deaths allotted to the miscellaneous group "Other Diseases of the Nervous System," 149 compared with 183 in 1965.

Diseases of the Circulatory System.—This, the major group of causes of death, accounted in 1966 for 4,289 deaths, 34.5 per cent. of the deaths from all causes, a larger proportion than in 1965 (33.5). In 1965 deaths in this group totalled 4,278. Of these 4,289 deaths, 78.3 per cent. were due to Arterio-sclerotic and Degenerative heart disease, which in 1966 accounted for 3,358 deaths, 90 fewer than in 1965. The Registrar General in his Annual Return now distinguishes Degenerative Heart Disease from Arterio-Sclerotic Heart Disease and includes coronary disease in the latter, allotting 2,581 deaths to this heading in 1966.

An analysis of the records of this Department shows that of 3,358 deaths attributed to Arterio-Sclerotic and Degenerative Heart Disease, 2,531 were allotted to Coronary Thrombosis. This is equivalent to 75.4 per cent., a smaller proportion than in 1965, 76.0 per cent.

Mortality from coronary disease is consistently higher in men than in women, as the following table (compiled in this Department) shows :—

		Males	Females	Total
1954	...	958	555	1,513
1955	...	1,062	609	1,671
1956	...	1,102	637	1,739
1957	...	1,151	717	1,868
1958	...	1,235	690	1,925
1959	...	1,238	723	1,961
1960	...	1,313	803	2,116
1961	...	1,392	883	2,275
1962	...	1,472	918	2,390
1963	...	1,505	935	2,440
1964	...	1,600	974	2,574
1965	...	1,545	1,049	2,594
1966	...	1,531	1,000	2,531

The age distribution of these 2,531 deaths shows a marked sex disparity :—

		-35	-45	-55	-65	-75	75+	All Ages
Males	...	4	54	216	493	439	325	1,531
Females	...	—	8	50	199	351	392	1,000

Deaths from coronary disease at ages under 55 formed a slightly larger proportion (17.9 per cent.) of all male deaths from this cause than in 1965 (17.0). In females this proportion was 5.8, a smaller proportion than in 1965 (8.0 per cent.).

In addition there were five deaths from angina pectoris (three male and two female). Only one (a male) was under 55 years.

The Registrar General attributed 149 deaths to chronic rheumatic heart disease, as against 161 in 1965. Deaths among females greatly outnumbered the male deaths, 96 and 53 respectively. None were under 25 years' age group and 17 were over 75 years. In 1966, the heaviest mortality was at ages 45 to 64 years. There were two deaths from rheumatic fever. One hundred and eighty-three deaths were allotted to Hypertensive Heart Disease (163 in 1965) and 84 to "Other Hypertensive Disease" (85 in 1965). "Other Diseases of the Heart" accounted for 160 deaths (140 in 1965) and "Other Circulatory Disease" for 353 (281 in 1965).

Diseases of the Respiratory System.—There were more deaths from respiratory disease in 1966, 1,596 compared with 1,451 in 1965. The rate which had been 1,449 in 1965 rose again in 1966 to 1,629. The increase was due to pneumonia which accounted for 652 deaths in 1966 as against 533 in 1965. The rate was 665 per million, as against 532 in 1965. Eight hundred and eight deaths were attributed to bronchitis, six fewer than in the previous year. This is equivalent to 50·6 per cent. of all the deaths in the group, a much lower proportion than in 1965 (56·1). A detailed review of the age, sex and seasonal distribution of the deaths from bronchitis and pneumonia will be found in the Infectious Disease Section, at page 240 of this Report. Seventy-two deaths were attributed to influenza, 55 more than in 1965. This is a greater number than in any year since 1961 (when there were 74 deaths). Reference is made in the Infectious Disease Section (page 238) to the outbreak of Influenza which occurred in the first quarter of the year. A variety of causes in "Other Respiratory Diseases" accounted for 64 deaths, 23 fewer than in the previous year.

Diseases of the Digestive System.—There was another increase in the deaths from digestive disease, 381 as against 358 in 1965. The death-rate, which had fallen from 385 per million in 1963 to 342 in 1964, rose again in 1966 to 389. The major single cause in this group, ulcer of the stomach and duodenum, accounted for 94 deaths compared with 76 in 1965 and 88 in 1964, and the rate rose sharply from 76 in 1965 to 96 in 1966. Deaths from intestinal obstruction and hernia (71) were two less than in 1965. Cirrhosis of the liver was responsible for 54 deaths, an increase of six. "Other Diseases of the Liver" accounted for 34 deaths (one less than in 1965) and "Other Digestive Diseases" for 45 (five less). Deaths from appendicitis, which had

remained at the same level (10) in each of the years 1962, 1963 and 1964, increased to 15 in 1966. The Registrar General, in his Annual Return combines "Gastritis and Duodenitis" with "Diarrhoea" (except of the new-born) under the heading "Gastritis, Duodenitis, Enteritis and Colitis (except diarrhoea of the new-born)" and allotted 68 deaths to this sub-group in 1966. Information is not yet available as to the allocation of these deaths to the individual causes under this heading but in his Annual Report for 1965 the Registrar General classified the 58 deaths in that year as follows:—20 to "Gastroenteritis (four weeks to 2 years)"; 4 to "Gastroenteritis (2 years and over)"; 33 to "Chronic Enteritis and Ulcerative Colitis.", and one to Gastritis and Duodenitis.

Of the 68 deaths in 1966, 20 (10 male and 10 female) were under one year of age, 5 (2 male and 3 female) were under 5 years and the remainder over 15 years.

Congenital Defects and Diseases of Early Infancy.—With the exception of deaths from congenital malformations, all the deaths attributed to this group occur at ages under 1 year and these are discussed in the appropriate section of Maternity and Child Welfare. A large proportion of the deaths from congenital malformation also occur before 1 year of age (in 1966, 105 of the 130 deaths were in this age group) but the mortality is not confined to this age group and the deaths, though relatively small in number, are widely distributed throughout all the age groups, the over 65's not excepted. The physical handicap of a congenital defect does not apparently curtail the normal lifespan—a fact of some importance in the provision of welfare services for those severely incapacitated by a congenital defect.

The distribution of the deaths from congenital malformations in 1966 is compared with 1951, 1961 and subsequent years as follows:—

MALES—		- 1	- 5	- 15	- 45	- 65	65+	All Ages
1951	...	70	7	3	2	1	1	84
1961	...	73	8	7	5	4	3	100
1962	...	79	8	5	11	1	1	105
1963	...	67	10	3	2	4	—	86
1964	...	48	5	1	6	2	1	63
1965	...	57	8	3	6	4	—	78
1966	...	53	5	1	3	2	1	65
FEMALES—								
1951	...	55	2	3	3	6	1	70
1961	...	74	5	6	2	4	1	92
1962	...	70	9	7	5	6	—	97
1963	...	65	5	3	3	2	—	78
1964	...	52	6	1	3	1	1	64
1965	...	49	7	4	3	5	—	68
1966	...	52	2	1	6	4	—	65

The Registrar General's provisional return for 1966 gives the sex and age distribution of these 130 deaths in three main groups as follows :—

		- 1	- 5	- 15	- 45	- 65	65+	Total
Congenital Malformations of the nervous system and sense Organs ...	M.	12	1	—	1	—	—	14
	F.	24	1	—	1	—	—	26
of the Circulatory System	M.	25	2	1	1	2	—	31
	F.	18	—	—	4	1	—	23
Other forms ...	M.	16	2	—	1	—	1	20
	F.	10	1	1	1	3	—	16
		105	7	2	9	6	1	130

Malignant Disease.—This major cause of death illustrates very clearly the difficulty in classification discussed in the Annual Report for 1964. It was there pointed out that where a cause of death is stated to be a neoplasm, cyst or tumour without further definition, such additional information as to whether the tumour was malignant or benign is all too often not provided and can be obtained only from the certifier and consequently there is always a difference between the figures in those two groups—the Registrar General showing more malignant tumours and fewer of an undetermined nature than the Medical Officer of Health. This is clearly shown in the following table which compares the deaths in the years 1964, 1965 and 1966 from Malignant and Benign Neoplasms as shown respectively by the Registrar General and this Department :—

	1966		1965		1964	
	R.G.	M.O.H.	R.G.	M.O.H.	R.G.	M.O.H.
Malignant Neoplasms	2,487	2,398	2,620	2,522	2,510	2,421
Benign and Unspecified Neoplasms ...	25	80	21	60	22	74
	<u>2,512</u>	<u>2,478</u>	<u>2,641</u>	<u>2,582</u>	<u>2,532</u>	<u>2,495</u>

A comparison of the death rates per million for Malignant Disease for certain years from 1951 onwards, as computed on the Registrar General's figures and on those of the Medical Officer of Health, is as follows :—

	R.G.	M.O.H.
1951	2,074	2,002
1961	2,289	2,219
1962	2,401	2,332
1963	2,415	2,366
1964	2,464	2,377
1965	2,617	2,520
1966	2,538	2,447

The following table (based on this Department's own figures) which relates the deaths from cancer for each sex and in each group shows the higher proportion of deaths from cancer among males and the tendency of this proportion to increase, while that for females has remained relatively stationary.

DEATHS FROM CANCER AS A PERCENTAGE OF DEATHS FROM ALL CAUSES
FOR EACH SEX AND IN EACH AGE GROUP.

	-15	-25	-35	-45	-55	-65	-75	75+	All Ages
MALES—									
1930/32 ...	0.17	1.83	2.78	6.80	12.79	17.95	15.38	8.12	6.73
1950/52 ...	1.38	6.93	12.76	16.76	22.07	22.24	18.34	11.96	16.10
1960/62 ...	1.67	10.88	14.65	19.94	25.22	27.11	21.28	13.62	19.34
FEMALES—									
1930/32 ...	0.12	0.65	3.91	11.76	21.41	21.69	15.31	8.19	10.24
1950/52 ...	0.98	3.43	8.94	22.76	27.05	25.02	17.36	9.24	15.11
1960/62 ...	2.28	5.61	19.83	28.35	36.58	25.11	17.20	10.97	16.51

The sex ratio of the deaths from cancer is shown from 1941 onwards in the following table.

RATIO : MALES TO 100 FEMALES.

1941	...	103	1963	...	145
1951	...	113	1964	...	132
1961	...	131	1965	...	125
1962	...	132	1966	...	132

In 1966 this male preponderance was present in all the age groups except 15 to 25, 35 to 45 and over 75 years. It was particularly noticeable in the age group 55 to 65 years in which there were 440 male to 229 female deaths. This male preponderance is shown in the following table (compiled from this Department's figures) :—

MALE DEATHS AS A RATIO OF 100 FEMALE DEATHS :

	-15	-25	-35	-45	-55	-65	-75	75+	All Ages
1930-32 ...	114	271	60	66	76	102	111	68	92
1950-52 ...	180	150	120	83	126	123	118	106	116
1960-62 ...	96	350	96	104	115	193	140	90	132
1965 ...	100	150	60	94	118	161	134	95	125
1966 ...	143	88	229	86	106	192	143	91	132

In the age period 45 to 55 there occurs in both sexes a sharp rise in the number of deaths from cancer. The table on page 60 shows the heaviest mortality in males to be between the ages of 55 and 75, and in the females at ages over 65 years. In 1966, 65.1 per cent. of all the male deaths occurred between the ages of 55 and 75 and 18.5 at ages 75 and over. In 1965 the respective ratios were 63.5 per cent. and 19.7 per cent. In females the proportion in the lower age group

was 52·6 per cent., a slight decrease from the previous year (54·5). At ages over 75, however, the proportion was higher, 26·9 per cent. as against 26·1 per cent. in 1965. Very similar proportions apply to the Registrar General's figures.

The following table shows the age distribution as a percentage of the total cancer deaths in each sex in 1966 (departmental figures).

	1965	- 15	- 25	- 35	- 45	- 55	- 65	- 75	75 +	All Ages
Males ...	0·7	0·5	1·2	3·2	10·0	32·2	32·8	18·5	100·0	
Females	0·7	0·8	0·7	4·9	13·4	22·3	30·4	26·9	100·0	

Apart from a slight recession in 1954, 1957 and 1959, male mortality has increased steadily since 1951. Of the 2,487 deaths attributed by the Registrar General, 1,428 were males, 39 fewer than in 1965. Female deaths totalled 1,059, a decrease of 94.

The Registrar General's provisional return classifies these deaths in three main groups only—malignant neoplasms of the respiratory system, of the lymphatic and haematopoietic tissues, and "all other." The deaths so allotted are shown as follows, compared with those for the two previous years :—

<i>Malignant Neoplasms—</i>					1966	1965	1964
of the respiratory system	...	...	M.		675	695	704
				F.	146	164	155
of the lymphatic and haematopoietic tissues	...	...	M.		54	63	64
				F.	66	49	50
All other forms	...	...	M.		699	709	662
				F.	847	940	875
All Forms	...		M.		1,428	1,467	1,430
				F.	1,059	1,153	1,080

These figures should be compared with the following which have been obtained from the analysis of cancer deaths carried out by the Statistical Section of this Department. Of the 1,365 male deaths attributed to cancer in 1966, 627 or 45·9 per cent. were attributed to cancer of the respiratory organs, the corresponding percentage of the female deaths being only 12·8 per cent. The trend of this form of cancer is clearly shown in the following table which compares the male and female deaths from cancer of the respiratory and the digestive organs over a period of some years :—

		Average			1964	1965	1966
		1932/41	1942/51	1952/61			
MALES—							
Respiratory Organs	...	96	244	518	666	659	627
Digestive Organs	...	491	554	483	422	457	431
FEMALES—							
Respiratory Organs	...	38	69	100	140	158	132
Digestive Organs	...	429	473	453	371	437	401

In 180 of the 431 male and 113 of the 401 female deaths from cancer of the digestive organs, the site of the disease was located in the stomach and small intestine. This is a decrease of 57 on the 1965 figure of 190 male and 160 female deaths. The death from cancer of this site in 1966 are compared as follows, with the average for each of the three preceding ten-year periods :—

DEATHS FROM CANCER OF THE STOMACH AND INTESTINE.

				Average			1964	1965	1966
				1932/41	1942/51	1952/61			
Males	...	...	...	190	219	201	170	190	180
Females	...	...	...	161	179	174	134	160	113

Deaths from cancer of the rectum showed some increase, 99 compared with 89 in 1965. The male deaths numbered 48 as against 51 female deaths. There were seven more deaths from cancer of the liver and biliary passages, 54 as against 47 in 1965, and of these 26 were female. The number of deaths from cancer of the pancreas increased to 97, as against 94 in 1965 and of these 50 were males and 47 females. The sub-group " Other Digestive Organs " accounted for 229 deaths, 18 fewer than in 1965. Cancer of the large intestine, usually included in " Other Digestive Organs " is responsible for most of the deaths in this group

Deaths from cancer of the buccal cavity and the pharynx were 38, three more than in 1965. There were 23 male and 15 female deaths. Male deaths from cancer of this site have shown a marked decline since the 1930's.

DEATHS FROM CANCER OF THE BUCCAL CAVITY AND PHARYNX.

				Average			1964	1965	1966
				1932/41	1942/51	1952/61			
Males	...	...	...	70	57	36	16	25	23
Females	...	...	...	11	13	15	19	10	15

Deaths from cancer of the breast, which, after cancer of the stomach, is the most common form of death from cancer in the female, were fewer by ten, 175 as against 185 in 1965. Of this number 19 were under 45 years, and 79 at ages over 65. There was one male death from this form of cancer.

Deaths from cancer of the lymphatic and haematopoietic tissues in 1966 were three more, 118 compared with 115 in 1965 and 117 in 1964. There were 53 male deaths and 65 female. Of this total of 118 twelve were under 15 years of age.

Most of the deaths in this group are due to leukaemia, a form of cancer which has attracted some attention in recent years owing to the fact that a larger proportion of the cases than in other kinds of malignant disease occur in children. Since 1951 deaths from leukaemia have varied between 34 and 40 a year. In 1966 there were 53 deaths compared with 48 in 1965. Of these 53 deaths (23 male and 30 female), five were under five years of age, two more than in 1965. The distribution throughout the age groups is shown as follows for 1966 and the six previous years :—

		—1	—2	—5	—20	—45	—55	—65	—75	75+	All Ages
1960	...	—	—	2	6	10	7	10	9	7	51
1961	...	—	1	5	3	4	1	13	8	9	44
1962	...	1	1	—	4	7	1	6	8	5	33
1963	...	—	1	3	6	3	8	7	10	11	49
1964	...	—	—	4	2	7	6	12	12	7	50
1965	...	—	1	2	3	4	8	9	11	10	48
1966	...	—	1	4	6	10	6	6	12	8	53

Details of the age and sex distribution of cancer with respect to the site of this disease are given in the table on the next page. The totals of both sexes for certain earlier years are shown for comparison.

GLASGOW, 1966—DEATHS FROM CANCER IN THE DIFFERENT SITES AS GIVEN IN THE INTERNATIONAL LIST OF CAUSES OF DEATH.
(as compiled in this Department.)

SITE OF LESION	MALES										FEMALES										BOTH SEXES	Both Sexes				
																						SEXES	All ages			
	-15	-25	-35	-45	-55	-65	-75	75+	Total	-15	-25	-35	-45	-55	-65	-75	75+	Total	1966	1965			1955	1945		
Buccal Cavity and Pharynx ...	—	—	—	1	3	5	6	8	23	—	—	—	—	1	1	4	9	15	38	35	43	71				
Digestive Organs and Peritoneum—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
(a) Oesophagus ...	—	—	—	—	2	14	10	6	32	—	—	—	2	1	4	3	13	23	55	66	55	74				
(b) Stomach and small Intestine including Duodenum ...	—	—	2	3	30	57	48	40	180	—	—	—	—	9	25	41	38	113	293	350	393	392				
(c) Rectum ...	—	—	1	—	3	10	19	15	48	—	—	—	4	6	9	15	17	51	99	89	113	143				
(d) Liver and Biliary Passage ...	—	—	—	—	3	8	13	4	28	—	—	—	1	3	3	14	5	26	54	47	44	70				
(e) Pancreas ...	—	—	—	3	4	14	18	11	50	—	—	—	2	5	6	18	16	47	97	94	73	54				
(f) Peritoneum ...	—	—	1	—	—	—	—	—	1	—	—	—	—	—	1	2	1	4	5	1	7	7				
(g) Other Digestive Organs ...	—	—	1	5	8	22	31	25	92	—	1	2	5	17	55	57	137	229	247	279	344					
Respiratory Organs ...	—	1	—	24	73	248	206	75	627	—	—	1	4	33	32	44	18	132	759	817	608	225				
Uterus ...	—	—	—	—	—	—	—	—	—	—	—	—	6	17	17	24	17	81	81	70	102	105				
Other Female Genital Organs ...	—	—	—	—	—	—	—	—	—	—	1	2	9	22	10	9	53	75	53	75	61	32				
Breast ...	—	—	—	—	—	—	—	—	—	—	—	1	18	31	45	39	40	171	175	185	164	160				
Male Genito-Urinary Organs ...	1	1	4	1	4	9	25	34	79	—	—	—	—	—	—	—	—	—	79	68	56	65				
Skin ...	—	—	2	—	—	—	—	3	5	—	1	—	—	2	2	—	4	9	14	24	20	23				
Lymphatic and Haematopoietic Tissues ...	7	2	3	4	6	10	17	4	53	5	2	3	1	8	15	15	13	65	118	115	94	159				
Other or Unspecified Organs ...	2	3	2	3	12	42	55	27	146	2	4	1	6	9	30	30	21	103	249	239	209	—				
Totals ...	10	7	16	44	148	440	448	252	1,365	7	8	7	51	139	229	314	278	1,033	2,398	2,522	2,321	1,924				

Deaths from violence.—In 1966 Violent Causes ranked sixth as a major cause of death in Glasgow, the Registrar General in his provisional return allotting 594 deaths to this group. This is another improvement on the two previous years' totals (654 in 1965 and 668 in 1964), and equivalent to 20·2 per cent. of all the Scottish deaths from Violent Causes, a smaller proportion than in the previous year (22·2). The death-rate was 606 per million as against 654 in 1965.

The following table shows a sex and age distribution of the deaths allotted to this group by the Registrar General in 1951 and from 1961 to date :—

Year	Males						Females					
	-5	-15	-45	-65	65+	Total	-5	-15	-45	-65	65+	Total
1951	40	38	86	84	84	332	35	9	28	35	99	206
1961	26	26	121	123	83	379	22	10	21	38	114	205
1962	31	29	133	147	91	431	20	10	40	58	114	242
1963	41	32	132	142	83	430	28	4	49	58	116	255
1964	36	33	100	134	104	407	28	12	48	53	120	261
1965	40	24	131	131	99	425	14	12	38	50	115	229
1966	34	25	137	122	71	389	19	10	39	49	88	205

The decrease was common to both sexes. Male deaths decreased from 425 in 1965 to 389 in 1966 and female deaths from 229 to 205. The male predominance which prevails in this group of causes of death was apparent in each age group under 65 years. Over 65 years female deaths totalled 88 compared with 71 male deaths.

A full analysis of the various causes of accidental death is provided by the Registrar General in his Annual Reports. The Report for 1966 will not, however, be published till later this year and the only information available therefore is that given in the Registrar's provisional return as follows, with those of 1965 and 1964 for comparison :—

<i>Number of deaths from—</i>	1966	1965	1964
Motor Vehicle Accidents	165	171	157
Other Road Vehicle Accidents	2	3	1
Accidents in the Home	193	255	266
Other Violence (BE 50)	146	133	144
Suicide and Self-inflicted Injury	88	92	100
	594	654	668

These figures may be compared with those supplied by the Statistical Section of this Department, an analysis of which according to sex, age and type of accident is shown on page 64. A discussion of the latter now follows.

In 1966 Inhalation and Ingestion of food accounted for 11 of the 24 accidental deaths under one year of age (46 per cent.) and accidental mechanical suffocation (i.e., by blankets, pillow or overlaying, for other 4 (17 per cent.). In the age group 1-5 years accidents involving motor vehicles accounted for 13 of the 30 deaths in this age group. Details are given elsewhere in this Report (in Section III—Maternity and Child Welfare, at page 78) of the deaths of infants and toddlers as a result of accidents in the home. In addition, this same section contains analyses of all accident cases treated by the City hospitals and of burning and scalding accidents in children under 15 years of age.

Burning and scalding accidents in school children aged 5 to 10 years are also investigated by the School Health Visitors and a full report on these will be found in Section IV at page 147.

The usual marked disproportion between the male and female deaths in the age group 5 to 10 years was again apparent in 1966 when all but six of the 23 deaths were male. Four of these deaths were due to motor vehicle accidents, five to drowning and two to a fall. There were two deaths from accidental mechanical suffocation and four from other and unspecified accidents.

Burns accounted for two of the six female deaths in this age group, one was the victim of assault and in the other the nature of the accident was not specified.

At ages over 65 years female deaths preponderate. In 1966 there were 68 male deaths and 86 female. This is equivalent to 18 per cent. of the male deaths and 42 per cent. of the female deaths from Violent Causes. The respective figures for 1965 were 23 per cent. and 51 per cent.

An analysis of the deaths *at ages 65 years and over* shows the following distribution of common causes of deaths from violence compared with the 99 male and 121 female deaths in 1965 :—

**PERCENTAGE OF TOTAL DEATHS FROM VIOLENT CAUSES.
AT AGES OVER 65 YEARS.**

	Males		Females	
	1966	1965	1966	1965
Falls	39.7	16.2	43.0	44.6
Road Accidents	13.2	19.2	19.8	12.4
Poisoning (Gas and Drugs)	10.4	25.2	11.6	17.4
Drowning	8.8	2.0	—	—
Burns	10.3	6.1	14.0	6.6
Suicide	2.9	—	1.2	0.8
Other Violence (including Homicide)	2.9	9.1	1.2	5.0
Unspecified	11.8	22.2	9.2	13.2
	100.0	100.0	100.0	100.0

In many cases only the nature of the injury is given in the death certificate and no information is available regarding the cause of the accident. Fracture of the femur for instance, particularly in an elderly woman, is nearly always the result of a fall, and in 1966 deaths resulting from an injury of this nature, without information as to its cause, have been allotted to falls, so reducing the number of such deaths formerly included under the heading "unspecified" in the above table.

Falls are by far the most common type of accident in persons over 65 years—especially so among women. In 1966, 27 male and 37 female deaths were attributed to a fall compared with 16 male and 54 female in 1965. (The figures for 1966, however, are not comparable with those of previous years for the reasons given in the preceding paragraph).

There was an increase of five in deaths from burning accidents, twelve of the nineteen deaths being women.

The eleven deaths from accidental poisoning by coal gas, or carbon monoxide is a notable decrease from the 38 deaths attributed to this cause in 1965. Accidental poisoning by drugs accounted for six deaths (one male and five female).

The number of deaths, which for lack of sufficient information, could not be assigned to any one type of accident, was 16 (eight of each sex).

Home Accidents.—The Registrar General now classifies certain deaths as home accidents and in his 1966 Return shows 193 deaths at all ages in this category. This figure may be compared with those of the previous years from 1962 to date, as follows :—

		1962	1963	1964	1965	1966
Males	...	151	134	134	142	105
Females	...	129	147	132	113	88
Total	...	<u>280</u>	<u>281</u>	<u>266</u>	<u>255</u>	<u>193</u>

This total of 193 is the equivalent of 32·5 per cent. of all the deaths from Violent Causes, lower than the Scottish rate of 35·6 per cent.

The proportion of all female deaths from Violent Causes due to an accident in the home was 42·9 compared with only 27·0 in males. The rates for Scotland were 52·9 and 25·0 per cent. respectively.

Eighty-four (43·5 per cent.) of the deaths from home accidents were at ages 65 years and over, the proportion being much higher in the females—54·5 per cent. as against 34·3 per cent. in the males.

Road Accidents.—Road traffic which is always a hazard for old people was responsible in 1966 (according to the Registrar General) for 35 deaths (14 male and 21 female) of persons aged 65 and over. That is to say only 13 per cent. of all the male deaths from road accidents were aged 65 years and over, compared with 36 per cent. of the female deaths

SEX AND AGE DISTRIBUTION OF DEATHS FROM VIOLENT CAUSES
1966, COMPARED WITH THE TOTALS FOR 1965 AND 1964.

Long Code Number										Total All Ages		
			-1	-5	-15	-45	-65	65+	1966	1965	1964	
802	Railway and other Train accident	M.	—	—	—	2	4	—	6	8	5	
		F.	—	—	—	1	—	1	—	—		
825	Motor Vehicle Accident ...	M.	—	7	6	36	21	9	79	81	80	
		F.	—	6	2	14	9	17	48	36	42	
858/866	Water and other Transport (including Air) Accident	M.	—	—	—	—	2	—	2	—	1	
		F.	—	—	—	—	1	—	1	—	—	
888	Accidental Poisoning by Drugs	M.	—	—	—	9	15	1	25	34	29	
		F.	—	1	—	15	16	5	37	22	26	
890/895	Accidental Poisoning by Gases and Vapours	M.	—	—	—	10	15	6	31	64	52	
		F.	—	—	—	3	1	5	9	36	44	
904	Accidental Falls	M.	—	1	3	10	8	27	49	34	52	
		F.	—	—	—	2	5	37	44	56	49	
910/914 919	Other Accidents (Falling objects, cutting or piercing instruments, machinery, electric current and Firearm)	M.	—	1	1	3	3	—	8	8	4	
		F.	—	—	—	—	—	—	—	1	1	
916/917	Burns and Scalds	M.	2	4	—	6	6	7	25	26	12	
		F.	1	2	4	3	4	12	26	18	20	
921/923	Inhalation and Ingestion of food etc.	M.	6	—	—	4	3	—	13	24	24	
		F.	5	1	—	—	2	1	9	14	13	
924/925	Accidental Mechanical Suffocation	M.	2	1	2	2	1	—	8	9	5	
		F.	2	—	—	1	—	—	3	1	3	
926	Lack of care of Infants under 1 year	M.	4	—	—	—	—	—	4	—	2	
		F.	—	—	—	—	—	—	—	—	3	
929	Accidental Drowning ...	M.	—	1	5	16	13	6	41	27	37	
		F.	—	1	—	1	4	—	6	3	7	
933	Hunger, Thirst and Exposure	M.	1	—	—	—	1	—	2	1	3	
		F.	—	—	—	—	—	—	—	1	—	
920-2-4-6	Other and unspecified Accidents	M.	1	3	6	27	26	8	71	85	77	
		F.	—	—	3	2	4	8	17	33	34	
950/953	Therapeutic Misadventure ...	M.	—	—	—	—	—	—	—	—	2	
		F.	—	—	—	—	—	—	—	2	2	
956/960 /965	Late effects of Violent Causes	M.	—	—	—	—	—	1	1	1	1	
		F.	—	—	—	1	—	—	1	1	2	
970/979	Suicide	M.	—	—	—	5	2	2	9	7	19	
		F.	—	—	—	—	—	1	1	6	6	
980/985	Homicide and Operations of War	M.	—	1	—	8	2	—	11	17	7	
		F.	—	—	1	—	2	—	3	5	10	
940	Complications due to Non- Therapeutic Medical and Surgical Procedures	M.	—	—	—	—	—	1	1	—	—	
		F.	—	—	—	—	—	—	—	—	—	
Totals			M.	16	19	23	138	122	68	386	—	—
			F.	8	11	10	42	49	86	206	—	—
Grand Totals 1966				24	30	33	180	171	154	592	—	—
1965				31	25	36	166	183	220	—	661	—
1964				34	31	45	148	187	229	—	—	674

SECTION III

MATERNITY AND CHILD WELFARE.

During 1966, the number of live births was 19,766 and of still births 397, giving a total of 20,163 births. The number of infant deaths was 598, showing a slight increase from 1965, when 586 deaths occurred, giving an infant mortality of 30, compared with 28.1 in 1965.

On the 598 infant deaths, 333 occurred under the age of one week.

During 1966, 12 cases of rickets in Glasgow children were reported from the Royal Hospital for Sick Children, three of these being in immigrant children. Five of the children were over 5 years of age. Intensive teaching on correct feeding of infants and young children has been carried out by medical staff, health visitors, and dietitians throughout the year, and this should surely improve the standard of nutrition.

Close co-operation has been maintained with the work of the Social Paediatric Research Group. Children found, during surveys carried out by them, to be suffering from nutritional defects are notified to the health visitor of the area and also to the dietitians, who visit the homes to give advice to the mothers.

In November, 1966, Pollokshaws Clinic was opened, replacing the former clinic at Bengal Street. The new premises, which provide adequate facilities, have allowed the staff to increase the scope of services offered to mothers, especially in mothercraft training and in psychoprophylaxis.

Commencing in March, 1966, routine Guthrie testing of all babies born at home has been carried out by domiciliary midwives and district nurses. In addition, routine Guthrie testing of babies dismissed from hospital before the test had been carried out and repeat tests on doubtful or suspicious cases have been done by health visitors.

During the year, postgraduate training of staff has continued. Child Welfare Medical Officers have attended courses in Psychiatry, Mental Deficiency, Child Development, and also the special refresher course on Developmental Paediatrics.

Increasing attention is being focused on the need for early detection and investigation of handicap in the young child, both at the Child Welfare Clinics throughout the City and at the special centres at Glenfarg Street and Balvicar Street. Special reports on these centres show the rapid expansion of these services. Other provisions for the

young handicapped child include the two special day nurseries at Broomhill and Balvicar, both of which now have a considerable waiting list. During 1966, the first group of mentally handicapped children of school age were admitted to Broomhill Centre. It is gratifying to record that a considerable proportion of the children who have attended these nurseries have been accepted for school at the age of 5 years.

MATERNAL DEATHS.

In attendance at the antenatal clinics were 3,868 patients whose pregnancy (excluding abortions) terminated in 1966. There were no deaths among these in 1966. Three deaths were registered in the City as a whole and the rate was 0.15 per 1,000 (live and still) births compared with 0.65 in 1965.

The following table, based on figures supplied by the Registrar General, compares the rates from each cause for the *whole City* with those of previous years.

STATEMENT SHOWING MATERNAL DEATHS AND RATES PER 1,000 BIRTHS IN GLASGOW AND SCOTLAND IN THE YEARS 1962-66.

	Deaths					Rate per 1,000 (live and still) Births				
	1962	1963	1964	1965	1966	1962	1963	1964	1965	1966
Accidents of Pregnancy	3	3	2	4	1	0.13	0.13	0.09	0.19	0.05
Puerperal Haemorrhage	1	2	1	1	—	0.04	0.04	0.04	0.05	—
Puerperal Septicaemia, including Post-abortive Sepsis	3	3	1	2	1	0.13	0.13	0.04	0.09	0.05
Toxaemia of Pregnancy, Albuminuria, Convulsions	2	—	1	5	1	0.08	0.09	0.04	0.23	0.05
Other Puerperal Diseases	1	2	2	2	—	0.04	0.04	0.09	0.09	—
Totals— Glasgow ...	10	10	7	14	3	0.42	0.43	0.30	0.65	0.15
Scotland ...	42	39	24	38	24	0.39	0.38	0.2	0.4	0.2

INFANT MORTALITY.

A decrease in the births was accompanied in 1966 by an increase in the number of infant deaths (from 586 in 1965 to 598), resulting in a rate of 30 per 1,000 births. This is an interruption of the trend which has been apparent since 1958, a slow but steady fall which, by 1965, had reached the lowest level yet recorded, 28 per 1,000 births.

The increase was confined to the male infants among whom there were 334 deaths compared with 321 in 1965 and their mortality rate rose from 30.0 in 1965 to 32.7 in 1966. There were 264 female deaths, one less than the previous year, but the female births were fewer and the rate was therefore higher, 27.6 as against 26.1 in 1965.

Since 1930 the trend of infant mortality in Glasgow has been as follows :—

1930-34	102	1960	32
1935-39	93	1961	31
1940-44	95	1962	32
1945-49	64	1963	32
1950-54	37	1964	29
1955-59	35	1965	28
1966	30		

Infant Mortality in Wards.—This increase was reflected in the ward rates, 22 of the City's 37 wards having higher rates than in 1965. In Springburn alone the rate remained unchanged at 21. Sixteen wards had a rate higher than that of the City as a whole, among them Whiteinch (50 as against 21 in 1965), Shettleston and Tollcross (49 as against 29), Maryhill (49 as against 28), and Mile End (46 as against 21). Two wards, Knightswood and Pollokshaws, had the same rate as that of the City (30). The lowest rate (11) was common to two wards, Langside (as against 12 in 1965) and Partick East (as against 23). Anderston, which in 1965 had a rate of 35, had the second lowest rate of 19.

MALES—		Rate per 1,000 Births				1966	
<i>Causes of Death</i>		1962	1963	1964	1965	M.O.H.	R.G.
I. Congenital Malformations		6.7	5.6	4.1	5.2	4.6	5.2
II. Diseases of Early Infancy		20.0	17.4	17.9	15.2	17.4	17.7
III. Diseases of Respiratory System	... ..	5.1	6.8	5.3	4.9	5.7	5.5
IV. Diseases of Digestive System	... ..	1.4	1.8	1.6	1.0	0.9	1.3
V. Diseases of Nervous System	... ..	1.1	0.9	1.1	0.7	0.5	0.1
VI. Tuberculosis	... ..	—	—	—	—	—	—
VII. Infectious Diseases	...	0.3	0.2	0.2	0.1	0.5	0.7
VIII to XI. All other causes		2.7	2.7	2.9	2.9	3.1	2.3
All causes	...	37.3	35.4	33.1	30.0	32.7	32.8

FEMALES— <i>Causes of Death</i>	Rate per 1 000 Births				1966	
	1962	1963	1964	1965	M.O.H.	R.G.
I. Congenital Malformations	5.8	5.9	5.2	4.5	4.4	5.4
II. Diseases of Early Infancy	12.4	12.6	10.2	13.3	13.6	12.8
III. Diseases of Respiratory System	4.8	4.4	3.6	4.4	4.8	4.7
IV. Diseases of Digestive System	1.0	2.3	1.8	1.1	1.4	1.5
V. Diseases of Nervous System	0.7	0.5	0.7	0.6	0.3	0.3
VI. Tuberculosis	—	0.1	—	—	—	—
VII. Infectious Diseases	—	0.1	0.3	0.2	0.1	0.5
VIII to XI. All other causes	2.4	2.3	2.1	2.0	3.0	2.3
All causes	27.1	28.2	23.9	26.1	27.6	27.5
Ratio—Males to 100 Females	137	129	148	121	126	—

Respiratory disease, one of the major causes of death in children under one year of age, accounted for 104 deaths in 1966, seven more than in 1965. The rate was 5.3 per 1,000 births compared with 4.6 in 1965.

There were 58 male deaths as against 52 in 1965 and the male rate rose from 4.9 in 1965 to 5.7 per 1,000 births in 1966. Among females there were 46 deaths, one more than in 1965. The rate of 4.8 per 1,000 was higher than that of 1965 (4.4).

Of these 104 deaths, 35 male and 24 female were due to pneumonia and 7 male and 6 female to bronchitis. There was one death from influenza, a male infant aged 10 months. Fifteen male and 16 female deaths were attributed to one or other of the various forms of respiratory disease grouped under the heading "Other Respiratory Diseases." There were 22 deaths from digestive disease, the same number as in 1965, and of these 9 were male and 13 female. Diarrhoea and enteritis (excluding diarrhoea of the newborn) accounted for 5 male and 9 female deaths; the remaining 8 (4 male and 4 female) being due to other digestive diseases.

Deaths from diseases of the nervous system were fewer, 8 (5 male and 3 female) as against 13 in the previous year.

This is the third successive year in which there has been no death from tuberculosis in this age group.

Infectious disease accounted for 6 deaths compared with only 3 in 1965. Five of these were due to meningococcal infection (4 males aged respectively under 1 week, and 5, 6 and 11 months; and a 4-month-old female). An 8-month-old male infant died from measles. There were, however, 11 deaths (5 male and 6 female) classified to "Other Infective and Parasitic Disease."

Violence (mostly accidental) is still a major cause of death of children under one year of age. In 1966 there were 24 deaths under this heading, seven fewer than in 1965. Of this number 16 were male and 8 female, all but five being under six months of age. Accidental asphyxia was responsible for the death of 15 infants (8 male and 7 female), 11 of these resulting from the inhalation of vomit or regurgitation of food. Three were accidentally smothered and a month-old baby was suffocated following an injury to his nose. Of the other nine deaths two were children of 7 and 9 months respectively who died from burns and a baby, not a week old, from scald. A seven-month-old male child died from starvation and neglect and three of the four children whose deaths were attributed to lack of attention at birth were foundlings. The remaining death was that of a two-month-old male infant from a fractured skull.

Deaths from congenital malformations and diseases of early infancy together comprise the largest group of causes of death in children under one year of age, and in 1966, 397 (66 per cent. of all the deaths) were so attributable. In 1965 there were 400 deaths (68 per cent.). There were more male deaths in this group in 1966, 225 as against 219 in 1965. The increase was due to atelectasis to which 77 deaths were allotted as against 59 in 1965. There were, however, fewer deaths from premature birth (32 as against 44) and from congenital malformations (47 as against 56). Deaths from injury at birth were exactly the same in number (36) as in 1965. Among the female infants there were 172 deaths, nine fewer than in the previous year, but this decrease was not confined to any one cause. Deaths from atelectasis, however, showed a slight increase, 53 as against 50 in 1965.

Neonatal Mortality.—There were 375 deaths in this age group in 1966 compared with 371 in 1965 and the rate was 19·0 per 1,000 as against 17·8. This is well above the rate for Scotland as a whole, 15·2 in 1966 as against 15·9 in 1965.

The increase in the Glasgow rate was this year confined to the male infants among whom there were 220 deaths compared with 204 in 1965. The rate therefore rose from 19·04 in that year to 21·56 in 1966. There were fewer deaths among the female infants, 155 compared with 167 in the previous year and the rate therefore fell a little from 16·48 in that year to 16·21 in 1966.

The following table is based on the departmental figures, no other information being as yet available :—

The rate per 1,000 births for each sex and for each of the four chief causes of death in this age group, from 1962 onwards, are as follows :—

				1962	1963	1964	1965	1966
Premature Birth	...	...	M.	4.34	3.16	4.32	4.11	3.14
			F.	2.13	3.02	3.14	3.45	3.45
Atelectasis	...	...	M.	6.22	6.42	6.66	5.51	7.54
			F.	4.08	4.30	3.32	4.94	5.33
Injury at Birth	...	...	M.	6.22	3.94	3.89	3.17	3.53
			F.	3.64	2.56	2.03	2.37	2.40
Congenital Malformations	...		M.	4.66	3.25	3.11	3.27	2.94
			F.	3.73	3.57	3.23	2.66	2.41

These infant deaths were analysed in more detail and the results for 1966 were as follows :—

ANALYSES OF INFANT AND NEONATAL DEATHS, 1966.

The total number of deaths of Glasgow children was 598.

Number of Males ...	334
Number of Females	264
	598

The age at death was as follows :—

Under 1 week ...	333	2 months ...	56	7 months ...	5
1-2 weeks ...	20	3 months ...	33	8 months ...	2
2-3 weeks ...	12	4 months ...	23	9 months ...	9
3-4 weeks ...	10	5 months ...	21	10 months ...	5
1 month ...	49	6 months ...	11	11 months ...	3
		Total ...			
			598		

The age of the mother was as follows :—

14 years ...	—	25-29 years ...	132
15 years ...	—	30-34 years ...	97
16 years ...	3	35-39 years ...	49
17 years ...	19	40-44 years ...	20
18 years ...	21	45 years ...	1
19 years ...	32	46 years ...	1
20-24 years ...	198	Not stated ...	25
		Total ...	
			598

The causes of death were as follows :—

	Male	Female	Total
Congenital Malformations ...	47	43	90
Birth Injury	36	23	59
Atelectasis	77	53	130
Pneumonia of the New Born ...	17	5	22
Diarrhoea of New Born ...	2	1	3
Haemolytic Disease of New Born	6	4	10
Congenital Debility	5	4	9
Premature Birth	32	34	66
Others	3	6	9
Disease of Respiratory System	58	46	104
Disease of Digestive System ...	9	13	22
Disease of Nervous System ...	5	3	8
Accidental Asphyxia	8	7	15
Other Violence	8	1	9
Infectious Disease	4	1	5
Other Causes	16	21	37
Totals	<u>333</u>	<u>265</u>	<u>598</u>

The number of neonatal deaths in 1966 was 375. Three hundred and thirty-three occurred in the first week of life. Of these 224 were premature.

No. of Deaths ...	Under 1 week	...	333
No. of Premature ...	Under 1 week	...	224

Attendance at birth in these cases was as follows :—

Institution ...	324
Home ...	34
Not stated ...	17
	<u>375</u>

The antenatal care was as follows :—

General Practitioner	95
Corporation Antenatal Clinic ...	44
Hospital Antenatal Clinic ...	178
No Antenatal Care	20
Not Stated	38
Total	<u>375</u>

The main causes of death in the first week were as follows :—

	Institution	Domiciliary	Not stated	Total
Congenital Malformations ...	33	4	2	39
Birth Injury	47	6	2	55
Atelectasis	115	7	5	127
Pneumonia	12	4	—	16
Haemolytic Disease of Newborn	9	—	—	9
Prematurity	54	8	2	64
Accidental Asphyxia ...	1	—	—	1
Other causes	17	1	4	22
Total	<u>288</u>	<u>30</u>	<u>15</u>	<u>333</u>

ILLEGITIMATE MORTALITY.

From 1st January, 1965, legitimacy ceased to be stated on the returns received from the local registrars and the only information available to the Department is what the Health Visitor is able to elicit when she visits the child's home. Of the 598 infant deaths in 1966 only 38 were known to be illegitimate but no information could be obtained in respect of other 48. According to the Registrar General, however, 54 of the 598 deaths were illegitimate.

The number of illegitimate births in 1966 was 1,749, 143 more than in 1965 and the illegitimate mortality rate therefore was 30·87. In 1964 the rate was 38·82.

Among the 18,017 legitimate births there were 544 deaths representing a rate of 30·19, an increase on the 1964 rate which was 27·78. The information for 1965 being incomplete the rates for that year are not regarded as comparable, and have not therefore been given here.

PREMATURE BIRTHS.

During 1966, the incidence of prematurity showed a continuing decrease from previous years.

Of the 397 stillbirths, 232 were premature (58 per cent.). Of the 19,766 live births, 1,284 were premature (6·5 per cent.) and 163 of these died within 24 hours of birth.

A special analysis of prematurity has been made, the following table showing the figures for 1966 :—

PREMATURE LIVE BIRTHS

Weight at Birth	Born at home or in a private maternity home												PREMATURE STILLBIRTHS				
	Born in Hospital			Nursed entirely at home or in a private maternity home			Transferred to hospital on or before 28th day			Born							
	Died			Died			Died										
	Total Births	Within 24 hours of Birth	In 1 and under 7 days	In 7 and under 28 days	Total Births	Within 24 hours of Birth	In 1 and under 7 days	In 7 and under 28 days	Total Births	Within 24 hours of birth	In 1 and under 7 days	In 7 and under 28 days			In hosp- ital	At home	In a private matern- ity home
2 lb. 3 oz. or less (1)	57	41	10	1	4	2	2	—	1	—	—	—	23	2	2		
Over 2 lb. 3 oz. up to and including 3 lb. 4 oz. (2)	96	37	10	3	22	9	4	—	—	—	—	—	81	11	1		
Over 3 lb. 4 oz. up to and including 4 lb. 6 oz. (3)	223	49	21	2	28	2	1	—	9	—	—	—	50	7	1		
Over 4 lb. 6 oz. up to and including 4 lb. 15 oz. (4)	311	13	15	1	29	2	2	—	8	—	—	—	25	1	—		
Over 4 lb. 15 oz. up to and including 5 lb. 8 oz. (5)	412	7	5	2	70	1	2	1	13	—	—	—	26	2	—		
Birth weight unknown (6)	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—		
Total	1,099	147	61	9	153	16	11	1	32	—	—	—	205	23	4		

(1) = 1,000 g. or less. (2) = 1,001—1,500 g. (3) = 1,501—2,000 g. (4) = 2,001—2,250 g. (5) = 2,251—2,500 g.

STILLBIRTHS.

The number of stillbirths registered in the City in 1966 was 468 but after correction for usual residence this figure was reduced to 397, 34 fewer than in 1965. The rate per 1,000 live and stillbirths was 19·7, compared with 20·3 in 1965 and 19·5 in 1964. The steady fall in this rate in recent years is shown in the table on page 75.

The rate for Scotland which in 1965 (17·9) had been the lowest recorded till then showed a further decrease in 1966 to 16·2.

Stillbirths in Wards.—Twenty-one wards had rates below that of the City, 14 had higher rates, and two, Calton and Cathcart, the City rate. Parkhead had the highest rate (35) followed by Maryhill (32), Pollokshaws (29) and the two wards of Shettleston and Dalmarnock with 27. The lowest rate was that of Ruchill (6). Other low rates were those of Partick East (8), Camphill (9) and Whiteinch (10).

In 1966 the number of stillbirths occurring to mothers resident in Glasgow was 397.

These stillbirths were analysed as follows :—

Total of cases	...	...	397	(Males 209 : Females 188)
Information incomplete	...		5	
Number fully analysed	...		<u>392</u>	

Antenatal Supervision

General Practitioner	96
Corporation Clinic ...	74
Hospital Clinic ...	179
None	11
Not stated	32
	392

Position in Family				Age of Mother			
1st	...	...	111	15 years	...	—	
2nd	...	...	59	16 years	...	1	
3rd	...	...	54	17 years	...	5	
4th	...	...	50	18 years	...	13	
5th	...	...	40	19 years	...	21	
6th	...	...	21	20-24 years	...	102	
7th	...	...	13	25-29 years	...	103	
8th	...	...	8	30-34 years	...	74	
9th	...	...	5	35-39 years	...	51	
10th	...	...	2	40-44 years	...	21	
11th	...	...	9	Not stated	...	1	
Not stated	...		20				
			<u>392</u>				<u>392</u>

The Glasgow birth rate, infant mortality and stillbirth rate, etc., are compared in the following table with those of Scotland, England and Wales and certain Scottish cities in 1966.

			(1) Birthrate per 1,000 of Population	(2) Stillbirth Rate per 1,000 Live and Stillbirths	(3) Neo-Natal Mortality per 1,000 Live Births	(4) Perinatal Mortality* Per 1,000 Live and Stillbirths	(5) Infant Mortality per 1,000 Live Births
Scotland	...	...	18.6	16	15	29	23
Glasgow	...	...	20.2	20	19	36	30
Edinburgh	...	...	16.7	13	15	26	22
Aberdeen	...	...	15.9	10	10	19	15
Dundee	...	...	18.2	11	13	22	18
England and Wales			17.7	15	13	26	19
Birmingham	...	...	19.1	17	14	29	21
Manchester	...	...	19.2	18	17	31	26
Liverpool	...	...	19.0	20	15	33	23
Leeds	...	...	17.9	17	17	31	27

* Perinatal mortality rate—the number of stillbirths and deaths under one week per 1,000 live and stillbirths.

MORTALITY AMONG TODDLERS.

The lowest number of deaths so far recorded in this age group (one to five years) was 74 in 1964. In 1965 there were 84 deaths and in 1966, 80. There was the usual preponderance of male deaths, 48, 10 less than in 1965, and a small increase in the female deaths from 26 to 32. More than half (49) were in the age group two to five years.

Accidents are the principal cause of death in toddlers, accounting for 30 deaths in 1966, five more than in 1965. This total is equivalent to 37.5 per cent. of all deaths at these ages compared with 29.8 in 1965 and 41.9 in 1964. Of these 30 deaths, 19 were males and 11 females, and almost half were the result of motor vehicle accidents (7 males and 6 females). The remainder were due to a variety of accidents as follows :—

A four-year-old boy was crushed by an electric loader in the docks and two three-years-olds (a boy and a girl) were drowned. Six children (ages 1 to 4 years) died from burns, and a two-year-old boy died as a result of a fall down a tenement stair. A year-old boy had a choking fit, a girl of the same age died from asphyxia due to inhalation of vomit and another two-year-old girl from aspirin poisoning. A two-year-old boy was probably the victim of an assault. In the remaining three deaths (two two-year-old and one three-year-old boys) no details were available as to the nature of the accident.

Respiratory disease, a common cause of death in toddlers, accounted for 22 deaths in 1966, seven more than in 1965. Of this number, 10 male and 7 female were due to pneumonia, two male and two female to bronchitis and one female to "other respiratory disease." There were no deaths from influenza or tuberculosis in this age group. The five deaths from malignant neoplasms were two fewer than in 1965. All but one were male children and none was under two years of age. The deaths allotted to this group in each of the years from 1955 to date are as shown :—

1955	...	...	3	1961	...	...	12
1956	...	...	2	1962	...	...	7
1957	...	...	15	1963	...	...	9
1958	...	...	16	1964	...	...	6
1959	...	...	8	1965	...	...	7
1960	...	...	4	1966	...	...	5

These five deaths were due to leukaemia, two more than in 1965.

There were only two deaths from infectious disease in 1966, a year-old boy from meningococcal infection and a girl of the same age from measles.

Congenital malformations were the cause of six deaths (four male and two female), six less than in 1965.

The following table compares the infant mortality with that of toddlers and shows the progressive reduction in both since 1900 :—

			Infant Mortality	Deaths 1-5 Years : Actual Number	Rate per 1,000 Population at Ages 1-5 Years
Year	...	...	Rate per 1,000 Births		
1900	...	...	153	2,754	39.2
1911	...	...	139	1,862	26.7
1921	...	...	106	1,494	19.2
1931	...	...	105	1,341	17.2
1941	...	...	111	635	8.3
1951	...	...	46	171	2.1
1952	...	...	41	140	1.8
1953	...	...	36	118	1.5
1954	...	...	35	92	1.2
1955	...	...	36	99	1.3
1956	...	...	33	85	1.1
1957	...	...	34.5	100	1.2
1958	...	...	35.1	86	1.03
1959	...	...	35.4	117	1.38
1960	...	...	32.2	103	1.19
1961	...	...	30.8	91	1.04
1962	...	...	32.4	99	1.13
1963	...	...	31.9	101	1.14
1964	...	...	28.7	74	0.83
1965	...	...	28.1	84	0.95
1966	...	...	30.2	80	0.93

HOME ACCIDENTS, 1966.

During 1966 the general hospitals in Glasgow, with the exception of Glasgow Royal Infirmary, have supplied detailed information about all home accidents. Glasgow Royal Infirmary supplied the total figures for such accidents each month, 1,636 in all, but the analysis was limited to the sex of the victim, 795 males and 841 females.

The total number from other hospitals was 5,590 of whom 887 came from outwith Glasgow.

The results of a detailed analysis of the 4,703 Glasgow cases are as follows :—

1. <i>According to sex—</i>	Male	...	2,160
	Female	...	2,540
	Not stated	...	3
			<u>4,703</u>

2. *According to age and sex—*

			Male	Female	Total
-1 year	...	...	75	68	143
1 "	...	...	221	159	380
2 years	...	...	190	135	325
3 "	...	...	123	96	219
4 "	...	...	93	57	150
5 "	...	...	54	48	102
6 "	...	...	43	27	70
7 "	...	...	32	22	54
8 "	...	...	28	21	49
9 "	...	...	15	18	33
10-14 "	...	...	131	100	231
15-24 "	...	...	310	309	619
25-34 "	...	...	246	287	533
35-44 "	...	...	179	221	400
45-54 "	...	...	176	286	462
55-64 "	...	...	109	255	364
65 "	...	...	14	30	44
66 "	...	...	13	18	31
67 "	...	...	7	17	24
68 "	...	...	11	20	31
69 "	...	...	5	25	30
70 "	...	...	9	26	35
71 "	...	...	4	15	19
72 "	...	...	9	22	31
73 "	...	...	10	17	27
74 "	...	...	4	23	27
75 "	...	...	4	21	25
76+ ...	...	...	39	189	228
Not stated	...	...	6	8	14
Total	...	...	<u>2,160</u>	<u>2,540</u>	<u>4,700</u>

3. *According to nature of accident and sex—*

	Male	Female	Total
Falls	953	1,220	2,173
Suffocation	2	1	3
Gas Poisoning	2	5	7
Poisoning	167	138	305
Burns	137	156	293
Others	899	1,020	1,919

4. *Accidents in those over 60 years of age—*

Male	169
Female	508
Total	677 or 14.4 per cent. of total accidents.

In this age group accidents due to falls were as undernoted :—

Male	111
Female	375
Total	486 or 71.8 per cent. of total accidents in this age group.

The number of accidents due to poisoning (excluding children under 5 years) numbered 93, 33 males and 60 females. Most of the cases involved overdosage with sedative drugs.

Analysis of causes of accidents in children under 5 years of age (excluding burns and scalds) is shown below.

	—1	—2	—3	—4	—5	Total
Falls	89	190	147	112	76	614
Foreign bodies (swallowed or inserted in orifice)	7	27	19	22	19	94
Poison	12	76	69	36	19	212
Lacerations	7	24	24	11	15	81
Hand or finger jammed, e.g. in door or window	2	20	29	13	4	68
Suffocation	1	1	—	—	—	2
Gas Poisoning	—	—	—	—	—	—
Electrocution	—	—	—	—	—	—
Dog bite	1	1	2	1	1	6
Others	24	41	35	24	16	140
Total	143	380	325	219	150	1,217

Accidents in children under 5 years constituted 25.9 per cent. of the total.

Burns and Scalds.—During 1966 various hospitals again notified to the Health Department burning and scalding accidents involving children under the age of fifteen years. Following notification of such accidents the Health Visitor visited the homes concerned to obtain details of the accident and to give advice about prevention.

The total number of burning and scalding accidents was 1,249. Some of this number were found not to be home accidents and several notifications were duplicated. An analysis has been done of the 833 burns and scalds in children under 5 years. Accidents involving school children are the subject of a separate report by the School Health Service.

Total number of accidents reviewed was 833.

		Male	Female	Total
Number of burns	...	204	182	386
Number of scalds	...	266	181	447
		<u>470</u>	<u>363</u>	<u>833</u>

Age in Years ...	Burns			Scalds		
	Male	Female	Total	Male	Female	Total
—1 ...	17	12	29	38	18	56
—2 ...	89	71	160	140	100	240
—3 ...	47	43	90	50	43	93
—4 ...	34	33	67	23	12	35
—5 ...	17	22	39	12	8	20
Age not stated	—	1	1	3	—	3
	<u>204</u>	<u>182</u>	<u>386</u>	<u>266</u>	<u>181</u>	<u>447</u>

Hospital admission was necessary for 107 children involved in these accidents and there was permanent scarring in 30 cases. Two children died, one from burns, the other from scalds. The victim of the burning accident was a little girl of 4 years who was left alone in a room with an unguarded coal fire. Her clothing was set alight when she fell into the fireplace. The other child was a baby boy of 9 months who crawled over to a bath of boiling water which had been left on the floor and toppled into it. He died from complications of the scalds he received.

Analysis of burning accidents gave the following main causes :—

Burns due to :—

Inadequate fire guard	...	...	...	...	...	85
Unguarded coal fire	...	...	...	...	...	62
Contact with hot iron	...	...	...	...	...	35
Contact with hot metal, e.g. cooker or heating stove	...	...	...	...	...	30
Unguarded electric fire	...	...	...	...	...	28
Faulty electrical equipment	...	...	...	...	...	13
Chemicals	...	...	...	...	...	6
Lighted paper	...	...	...	...	...	4
Cigarette	...	...	...	...	...	3
Matches	...	...	...	...	...	3
Bonfire in garden or back green	...	...	...	...	...	3
Fireworks	...	...	...	...	...	1
Blow out of gas oven	...	...	...	...	...	1

The most frequent cause of burning accidents was the use of an inadequate fire guard. A proper guard is firmly fixed in position by hooks permanently attached to the tiles of the fireplace so that it is not easily displaced. It is large enough to place all heated parts of the fireplace out of reach and it has a special device to allow refuelling without removal of the guard. A guard which does not satisfy these standards is inadequate and may give a feeling of false security. It is also dangerous to rely solely on the dress guard which is fitted to electric fires. Many of these are so designed that children can poke their fingers between the bars. All sources of heat, coal fire, electric fires, gas fires and convector stoves should be adequately guarded. Another common cause of burning accidents was the hot iron left lying on the floor or placed so that a pull on the dangling flex brought the iron into contact with the child.

Many scalds were caused by leaving containers with hot liquid within reach of young children. Examples of this were the placing of cups of tea on low tables or the arm of a chair. The overhanging table cloth and the dangling flex of an electric kettle were other menaces. It was disconcerting to find, too, that quite a number of scalds were caused by neglecting the precaution of pouring cold water first into a bath and then adding only enough hot water to bring the water to a safe temperature.

The descriptions of the accidents frequently illustrated how rapid and unpredictable children's movements are. It is therefore very necessary for responsible adults to be ever vigilant and to use constant foresight in order to make their children's environment as safe as possible.

CHILD WELFARE SCHEME.

Child Welfare Centres.—In November, 1966 the clinic at Bengal Street was transferred to new premises at Wellgreen (off Haggs Road), Pollokshaws. There are now 48 Antenatal, 28 Postnatal, 18 Consultative, 103 Child Welfare and 2 ultra-violet ray treatment sessions each week. In addition four Child Welfare Clinics are held weekly at the Royal Maternity and Women's Hospital.

The time-table of clinics as now organised is as follows :—

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE.

Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative and Postnatal Clinics
130 WILLIAM STREET, ANDERSTON—		
Monday, 1.30 p.m.	Tuesday, 1.30 p.m.	Tuesday, 1.30 p.m.
Wednesday, 8.30 a.m.	—	—
Friday, 8.30 a.m.	—	—
12 SANDY ROAD, PARTICK—		
Monday, 8.30 a.m.	Monday, 1.30 p.m.	Monday, 1.30 p.m.
Wednesday, 1.30 p.m.	Thursday, 8.30 a.m.	†Tuesday, 8.30 a.m.
Thursday, 1.30 p.m.	—	—
18 PLEAN STREET, BLAWARTHILL—		
Tuesday, 8.30 a.m.	Wednesday, 1.30 p.m.	Wednesday, 1.30 p.m.
Tuesday, 1.30 p.m.	—	†Thursday, 1.30 p.m.
Wednesday, 8.30 a.m.	—	—
Friday, 1.30 p.m.	—	—
BLACKWOOD STREET, NETHERTON—		
Tuesday, 1.30 p.m.	Wednesday, 8.30 a.m.	Wednesday, 8.30 a.m.
Friday, 1.30 p.m.	—	—
STUART LAIDLAW CLINIC, 90 KINFAUNS DRIVE, DRUMCHAPEL		
Monday, 1.30 p.m.	Monday, 8.30 a.m.	Monday, 8.30 a.m.
Wednesday, 8.30 a.m.	Thursday, 8.30 a.m.	†Thursday, 1.30 p.m.
Wednesday, 1.30 p.m.	—	—
Thursday, 1.30 p.m.	—	—
Friday, 1.30 p.m.	—	—
15 GLENBARR STREET, PROVAN—		
Monday, 1.30 p.m.	Tuesday, 8.30 a.m.	Tuesday, 8.30 a.m.
Tuesday, 1.30 p.m.	—	†Tuesday, 8.30 a.m.
Wednesday, 8.30 a.m.	—	—
Friday, 8.30 a.m.	—	—
Friday, 1.30 p.m.	—	—
† Consultative Clinics		

† Consultative Clinics

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

	Clinics for Children and Nursing Mothers		Clinics for Expectant Mothers		Consultative and Postnatal Clinics	
194	FERNBANK STREET, SPRINGBURN—					
	Monday,	1.30 p.m.	Tuesday,	1.30 p.m.	Tuesday,	1.30 p.m.
	Tuesday,	8.30 a.m.	Thursday,	1.30 p.m.	†Tuesday,	1.30 p.m.
	Thursday,	8.30 a.m.	—	—	—	—
101	DENMARK STREET, POSSILPARK—					
	Monday,	8.30 a.m.	Wednesday,	8.30 a.m.	Wednesday,	8.30 a.m.
	Wednesday,	1.30 p.m.	—	—	†Friday,	8.30 a.m.
	Friday,	1.30 p.m.	—	—	—	—
120	LIDDESDALE ROAD, MILTON—					
	Wednesday,	1.30 p.m.	Monday,	8.30 a.m.	Monday,	8.30 a.m.
3	CALLANDER STREET, COWCADDENS—					
	Monday,	8.30 a.m.	Tuesday,	1.30 p.m.	Friday,	8.30 a.m.
	Tuesday,	8.30 a.m.	Friday,	8.30 a.m.	†Friday,	1.30 p.m.
	Wednesday,	1.30 p.m.	—	—	—	—
	Thursday,	8.30 a.m.	—	—	—	—
	Thursday,	1.30 p.m.	—	—	—	—
60	AVENUEPARK STREET, MARYHILL—					
	Tuesday,	1.30 p.m.	Tuesday,	8.30 a.m.	†Monday,	1.30 p.m.
	Wednesday,	8.30 a.m.	Thursday,	1.30 p.m.	Thursday	1.30 p.m.
	Thursday,	8.30 a.m.	—	—	—	—
	Friday,	8.30 a.m.	—	—	—	—
106	ORR STREET, BRIDGETON—					
	—	—	Monday,	8.30 a.m.	Monday,	8.30 a.m.
	—	—	Tuesday,	8.30 a.m.	†Tuesday,	1.30 p.m.
	—	—	Thursday,	1.30 p.m.	—	—
	—	—	Friday,	8.30 a.m.	—	—
10	REDAN STREET, BRIDGETON—					
	Monday,	1.30 p.m.	—	—	—	—
	Tuesday,	1.30 p.m.	—	—	—	—
	Wednesday,	1.30 p.m.	—	—	—	—
	Thursday,	8.30 a.m.	—	—	—	—
	Thursday,	1.30 p.m.	—	—	—	—
	Friday,	8.30 a.m.	—	—	—	—
	Friday,	1.30 p.m.	—	—	—	—
150	WELLSHOT ROAD, SHETTLESTON—					
	Monday,	1.30 p.m.	Thursday,	8.30 a.m.	†Thursday,	8.30 a.m.
	Tuesday,	8.30 a.m.	—	—	Thursday,	8.30 p.m.
	Tuesday,	1.30 p.m.	—	—	—	—
	Wednesday,	8.30 a.m.	—	—	—	—
	Wednesday,	1.30 p.m.	—	—	—	—
	Friday,	1.30 p.m.	—	—	—	—

† Consultative Clinics.

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

Clinics for Children and Nursing Mothers		Clinics for Expectant Mothers		Consultative and Postnatal Clinics	
MOBILE UNIT, CARNTYNE—					
Tuesday,	1.30 p.m.	Tuesday,	8.30 a.m.	Tuesday,	8.30 a.m.
Thursday	1.30 p.m.	—	—	—	—
Friday,	8.30 a.m.	—	—	—	—
Friday,	1.30 p.m.	—	—	—	—
5 CRAIGLOCKHART STREET, GARTHAMLOCK—					
Wednesday,	1.30 p.m.	—	—	—	—
74 WELLHOUSE CRESCENT, EASTERHOUSE—					
Tuesday,	1.30 p.m.	Tuesday,	8.30 a.m.	Tuesday,	8.30 a.m.
Thursday,	8.30 a.m.	—	—	—	—
Thursday,	1.30 p.m.	—	—	—	—
2 LOCHDOCHART ROAD, ROGERFIELD—					
Monday,	1.30 p.m.	Wednesday,	8.30 a.m.	Wednesday,	8.30 a.m.
Wednesday,	1.30 p.m.	—	—	†Monday,	1.30 a.m.
Friday,	8.30 a.m.	—	—	—	—
Friday,	1.30 p.m.	—	—	—	—
26 FLORENCE STREET, GORBALS—					
Monday,	1.30 p.m.	Tuesday,	1.30 p.m.	Tuesday,	1.30 p.m.
Tuesday,	1.30 p.m.	Wednesday,	1.30 p.m.	†Friday,	8.30 p.m.
Thursday,	1.30 p.m.	Friday,	1.30 p.m.	—	—
Friday,	1.30 p.m.	—	—	—	—
12 FAULDHOUSE STREET, OATLANDS—					
Monday,	1.30 p.m.	Wednesday,	8.30 a.m.	Wednesday,	8.30 a.m.
Thursday,	8.30 a.m.	—	—	—	—
WELL GREEN, POLLOKSHAWS—					
Tuesday,	1.30 p.m.	Friday,	8.30 a.m.	Friday,	8.30 a.m.
Wednesday,	1.30 p.m.	—	—	—	—
46 BALVICAR STREET, QUEEN'S PARK—					
Monday,	1.30 p.m.	Tuesday,	1.30 p.m.	Friday,	1.30 p.m.
Tuesday,	8.30 a.m.	Friday,	1.30 p.m.	†Friday,	8.30 a.m.
Wednesday,	8.30 a.m.	—	—	—	—
Wednesday,	1.30 p.m.	—	—	—	—
Thursday,	1.30 p.m.	—	—	—	—
183 PROSPECTHILL ROAD, MOUNT FLORIDA—					
Monday,	1.30 p.m.	Wednesday,	8.30 a.m.	†Tuesday,	8.30 a.m.
Tuesday,	1.30 p.m.	Friday,	8.30 a.m.	Friday,	8.30 a.m.
Thursday,	8.30 a.m.	—	—	—	—
Thursday,	1.30 p.m.	—	—	—	—
22 ARNPRIOR QUADRANT, CASTLEMILK—					
Monday,	1.30 p.m.	Thursday,	1.30 p.m.	Thursday,	1.30 p.m.
Tuesday,	8.30 a.m.	—	—	—	—
Thursday,	8.30 a.m.	—	—	—	—

† Consultative Clinics.

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

Clinics for Children and Nursing Mothers		Clinics for Expectant Mothers		Consultative and Postnatal Clinics	
8 BARLIA DRIVE, CASTLEMILK—					
Tuesday,	8.30 a.m.	Tuesday,	1.30 p.m.	Tuesday,	1.30 p.m.
Wednesday,	1.30 p.m.	—	—	†Thursday,	1.30 p.m.
Friday,	1.30 p.m.	—	—	—	—
NETHERPLACE ROAD, POLLOK—					
Monday,	1.30 p.m.	Monday,	8.30 a.m.	Monday,	8.30 a.m.
Wednesday,	1.30 p.m.	Wednesday,	8.30 a.m.	†Friday,	8.30 a.m.
Thursday,	8.30 a.m.	Thursday,	1.30 p.m.	—	—
Friday,	1.30 p.m.	—	—	—	—
132 WEIR STREET, KINNING PARK—					
Tuesday,	8.30 a.m.	—	—	—	—
Thursday,	8.30 a.m.	—	—	—	—
401 GOVAN ROAD, GOVAN—					
Monday,	1.30 p.m.	Monday,	8.30 a.m.	†Tuesday,	1.30 p.m.
Wednesday,	1.30 p.m.	Tuesday,	8.30 a.m.	Thursday,	1.30 p.m.
Friday,	8.30 a.m.	Thursday,	1.30 p.m.	—	—
		Friday,	1.30 p.m.	—	—
20 ARKLET ROAD, ELDERPARK—					
Monday,	1.30 p.m.	Monday,	8.30 a.m.	†Thursday,	8.30 a.m.
Wednesday,	1.30 p.m.	Tuesday,	8.30 a.m.	Friday,	8.30 a.m.
Thursday,	1.30 p.m.	Tuesday,	1.30 p.m.	—	—
Friday,	1.30 p.m.	Friday,	8.30 a.m.	—	—
74 BERRYKNOWES ROAD, BERRYKNOWES					
Tuesday,	1.30 p.m.	Monday,	8.30 a.m.	Monday,	8.30 a.m.
Friday,	1.30 p.m.	—	—	—	—
CRAIGMUIR ROAD, PENILEE—					
Wednesday,	1.30 p.m.	Monday,	1.30 p.m.	Monday,	1.30 p.m.
Friday,	1.30 p.m.	—	—	—	—
ROYAL MATERNITY AND WOMEN'S HOSPITAL, ROTTENROW—					
Monday	*11 a.m.	Monday,	1 p.m.	—	—
Tuesday,	*11 a.m.	Tuesday,	1 p.m.	—	—
Wednesday,	*11 a.m.	Wednesday,	1 p.m.	—	—
		Thursday,	1 p.m.	—	—
Friday,	*11 a.m.	Friday,	1 p.m.	—	—
		Saturday,	9 a.m.	—	—

† Consultative Clinics.

* Clinics for infants under one year of age.

INFANT CONSULTATIONS.

There was a decrease of 101 in the number of sessions, 5,293 in 1966 compared with 5,394 in 1965.

The total number of primary attendances of all children was 14,572 and subsequent attendances 155,055 compared with the corresponding figure of 14,858 and 157,595 in 1965.

The following table gives the attendances at each consultation centre during 1966 with the corresponding total figures for the previous year :—

ATTENDANCES AT INFANT CONSULTATIONS, 1966.

		No. of Con- sulta- tions held	Children born 1966 No. of Attendances		Children born 1965 No. of Attendances		Children born other years No. of Attendances		Total No. No. of Attendances		1965—Total No. of Attendances	
			Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Central—												
Anderston	...	149	376	1,968	59	1,676	16	725	451	4,369	467	3,297
Partick	...	150	529	2,234	102	2,119	23	514	654	4,867	627	5,281
Blawarthill	...	206	524	3,277	68	3,017	14	1,910	606	8,204	654	7,267
R.H.S.C.	...	—	—	—	—	—	—	—	—	—	182	1,555
Netherton	...	102	214	1,176	41	1,082	2	464	257	2,722	221	2,548
Drumchapel	...	252	412	2,425	109	2,793	47	1,931	568	7,149	559	8,024
North—												
Provan	...	289	533	2,267	138	2,439	40	1,150	711	5,856	701	6,473
Springburn	...	146	444	2,435	76	2,339	13	421	533	5,195	577	5,796
Denmark Street		144	255	1,043	88	1,155	66	400	409	2,598	407	2,813
Milton	...	104	154	800	37	714	3	299	194	1,813	180	1,990
Cowcaddens	...	254	439	2,533	112	2,974	52	1,036	603	6,543	599	7,411
Maryhill	...	207	598	2,783	130	2,966	24	1,066	752	6,815	624	7,017
East—												
Redan Street	...	355	938	5,482	159	4,964	34	2,199	1,131	12,645	1,253	11,074
Shettleston	...	304	582	2,849	123	2,644	67	1,415	772	6,908	770	7,654
Mobile—Carntyne		205	370	1,986	148	2,288	29	1,177	547	5,451	525	5,346
Rogerfield	...	199	195	898	90	1,580	38	1,337	323	3,815	382	3,814
Garthamlock	...	52	139	575	24	730	6	311	169	1,616	140	1,547
Easterhouse	...	156	260	1,441	62	1,808	24	977	346	4,226	282	4,578
South-East—												
Gorbals	...	200	532	2,298	118	1,989	18	904	668	5,191	694	5,861
Pollokshaws	...	104	168	1,067	40	846	18	404	226	2,317	178	1,976
Balvicar Street	...	254	609	4,873	89	4,262	15	967	713	10,102	753	8,094
Oatlands	...	98	198	1,388	33	1,335	5	595	236	3,318	211	3,316
Mount Florida	...	202	466	2,754	56	2,560	17	842	539	6,156	542	7,440
Arnprior Quadrant		150	303	2,188	77	2,016	20	1,055	400	5,259	430	4,433
Barlia Drive	...	154	337	2,081	123	1,973	78	1,241	538	5,295	506	4,785
South-West—												
Pollok	...	200	370	2,698	100	2,912	35	1,316	505	6,926	478	6,184
Weir Street	...	104	222	1,228	43	1,158	12	367	277	2,753	305	2,688
Govan	...	149	372	2,101	56	1,976	15	421	443	4,498	475	4,768
Elderpark	...	200	514	2,841	106	2,953	4	773	624	6,567	753	7,720
Penilee	...	102	142	1,086	29	1,077	4	649	175	2,812	233	3,121
Berryknowes	...	102	172	1,559	24	1,136	6	374	202	3,069	170	3,724
		5,293	11,367	4,334	2,460	63,481	745	27,240	14,572	155,055	14,858	157,595
		75,701		65,941		27,985		169,627		172,453		

Infant Consultations are also held at the Maternity Hospital and attendances at these in 1966 numbered 1,470 compared with 1,706 in 1965. Attendances at the Mothercraft Classes totalled 2,293.

Antenatal Consultations.—Sessions at antenatal clinics numbered 2,449 compared with 2,518 for the preceding year. The total attendances were 33,918 compared with 37,712 in 1965. Primary attendances were 3,952 or 201 less than the previous year (1965), and subsequent attendances numbered 29,966, a decrease of 3,593. Consultations and attendances at each of the centres are shown in the following table :—

ATTENDANCES AT ANTENATAL CLINICS, 1966.

	No. of Clinic Sessions	Number of Attendances			Hospital Cases
		Primary	Subsequent	Total	
Richard Street ...	52	80	538	618	1
Partick ...	98	159	981	1,140	7
Blawarthill ...	52	67	782	849	2
Netherton ...	52	26	225	251	3
Drumchapel ...	98	146	1,082	1,228	4
Provan ...	104	76	445	521	1
Springburn ...	104	161	765	926	14
Denmark Street ...	52	75	548	623	15
Milton ...	46	30	229	259	2
Cowcaddens ...	114	155	1,311	1,466	13
Maryhill ...	104	211	1,514	1,725	7
Orr Street ...	201	288	3,037	3,325	3
Shettleston ...	72	112	922	1,034	—
Mobile—Carntyne	52	20	175	195	—
Garthamlock ...	—	—	—	—	—
Easterhouse ...	52	56	317	373	—
Rogerfield ...	52	48	389	437	2
Gorbals ...	154	353	1,948	2,301	—
Pollokshaws ...	51	54	425	479	—
Balvicar Street ...	102	239	1,747	1,986	—
Oatlands ...	52	45	398	443	—
Mount Florida ...	103	125	1,105	1,230	—
Arnprior Quadrant	52	76	458	534	—
Barlia Drive ...	52	93	779	872	—
Pollok ...	150	286	1,581	1,867	3
Govan ...	181	397	3,301	3,698	—
Elderpark ...	151	409	3,473	3,882	8
Penilee ...	48	75	738	813	—
Berryknowes ...	48	90	753	843	—
	2,449	3,952	29,966	33,918	85

ATTENDANCES AT POSTNATAL AND CONSULTATIVE CLINICS, 1966.

	No. of		Primary		Subsequent		Total	
	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative
Richard Street ...	52	—	25	—	4	—	29	—
Partick ...	49	51	34	130	4	207	38	337
Blawarthill ...	51	41	22	66	2	108	24	174
Netherton ...	52	—	13	—	4	—	17	—
Drumchapel ...	49	45	43	122	20	57	63	179
Provan ...	49	30	7	51	—	12	7	63
Springburn ...	49	12	5	23	—	2	5	25
Denmark Street ...	52	11	5	25	—	13	5	38
Milton ...	46	—	6	—	—	—	6	—
Cowcaddens ...	49	48	91	248	64	311	155	559
Maryhill ...	49	46	64	159	23	123	87	282
Orr Street ...	50	47	52	133	59	114	111	247
Shettleston ...	51	21	21	52	2	28	23	80
Mobile—Carntyne ...	52	—	17	—	16	—	33	—
Garthamlock ...	—	—	—	—	—	—	—	—
Easterhouse ...	50	—	8	—	4	—	12	—
Rogerfield ...	51	5	13	6	9	6	22	12
Gorbals ...	49	51	56	291	11	137	67	428
Pollokshaws ...	51	—	17	—	3	—	20	—
Balvicar ...	49	34	103	210	5	15	108	225
Oatlands ...	52	—	10	—	3	—	13	—
Mount Florida ...	49	47	71	170	1	52	72	222
Arnprior Quadrant	52	—	54	—	6	—	60	—
Barlia Drive ...	51	43	16	126	1	67	17	193
Pollok ...	49	50	77	260	8	464	85	724
Govan ...	50	52	41	384	1	242	42	626
Elderpark ...	49	51	105	500	133	172	238	672
Penilee ...	48	—	27	—	17	—	44	—
Berryknowes ...	48	—	25	—	4	—	29	—
	1,398	685	1,028	2,956	404	2,130	1,432	5,086

MOTHERCRAFT CLASSES.

Training in mothercraft and preparation for labour form a very important part of antenatal care. Tuition is given either during antenatal sessions or at a class held specially for this at the various clinics. Two health visitors are full-time mothercraft teachers who hold classes at certain of the clinics, the teaching in the others being undertaken by the health visitors of these clinics. The course covers simple instruction in physiology of pregnancy and labour, preparation for confinement, preparation of layette, infant feeding, bathing and general care, and instruction in psychoprophylaxis.

The classes are open to any expectant mother and are not limited to those in attendance at the antenatal clinics. General practitioners are encouraged to send along any expectant mothers under their care who may wish to benefit from the teaching provided at the clinic.

"Health of Mother and Child."—This book has been completely rewritten and the new edition became available in the autumn of 1966.

ULTRA-VIOLET RAY CLINIC.

It is desirable to continue the arrangements for light treatment of certain children.

RECORD OF ATTENDANCES AND CONSULTATIONS DURING 1966.

		Children -- 1 year		Children + 1 year		Mothers		Total	
		Number of Attendances		Number of Attendances		Number of Attendances		Number of Attendances	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Provan	98	—	—	72	775	—	—	72	775

DENTAL TREATMENT OF EXPECTANT AND NURSING MOTHERS.

Since the National Health Service Act was amended to allow expectant and nursing mothers to receive free treatment from general dental practitioners as well as in local authority clinics we have, in common with other local authorities, had a steadily decreasing number of mothers applying for treatment in our clinics. This amendment quite rightly allows those who look after their teeth to fulfil their understandable preference to continue treatment with their regular dental practitioner. It is felt, however, that the large number of expectant and nursing mothers who do not realise the importance of efficient mastication of their food and a lack of oral sepsis at this time can now more easily ignore their clinic doctor's advice and do nothing about their dental condition. As decentralising and widening the treatment facilities offered in our clinics has had no effect on the number of mothers attending, a more direct approach is planned including giving talks to antenatal groups.

Compared with the previous year, the number of patients treated showed a drop of 36 per cent. while the time devoted to them was reduced by 66 per cent. Based on items of work per treatment session, the year showed an increase in productivity of 29 per cent.

SUMMARY OF CLINICAL ATTENDANCES AND TREATMENTS.

First attendances, 148 ; total attendances, 825 ; fillings, 163 ; extractions, 703 ; administration of general anaesthetic, 42 ; other operations, 500 ; dentures, 132 ; repairs to dentures, 9 ; relines, 25 ; X-rays—*intra-oral*, 23—*extra-oral*, nil.

DAY NURSERIES AS AT END OF 1966.

	Approved for training	No. of Approved Places	No. of Children on register at end of year				Average daily attendances during year		Waiting lists at end of year	
			0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.	0-2 yrs.	2-5 yrs.
"Bedford Street," 42 Bedford Street, C.5	—	10	30	12	33	7	23	11	32	
"Bridgeton," 106 Orr Street, S.E.	Yes	20	30	22	30	15	25	90	185	
"Broompark," 7 Broompark Circus, E.1	Yes	30	30	30	30	21	24	9	13	
"Clutha Street," 36 Clutha Street, S.W.1	Yes	20	30	20	30	16	23	30	40	
"Cowcaddens," 91 Dunblane Street, C.4	Yes	18	27	17	28	13	27	42	66	
"Craigielea," 2 Craigpark, E.1	Yes	20	30	20	32	17	28	18	24	
"Crail Street," 60 Crail Street, E.1	Yes	20	30	17	31	13	26	26	82	
"Elderpark," Arklet Road, S.W.1	—	10	30	12	32	10	27	20	46	
"Hamiltonhill," 101 Ellesmere Street, N.1	Yes	20	30	17	32	14	26	26	94	
"Holmlea," 77 Holmlea Road, S.4	Yes	20	30	23	30	16	26	35	28	
"Kingston," 132 Weir Street, C.5	—	8	32	5	38	6	35	7	27	
"Onslow Drive," 6 Onslow Drive, E.1	Yes	20	40	18	40	13	29	6	37	
"Pollokshaws," 11 Greenbank Street, S.3	—	10	30	12	29	9	24	20	30	
"Quarrybrae," Pharonhill Street, E.1	Yes	21	—	20	4	14	3	14	—	
22 Sandy Road, W.1	Yes	15	25	13	26	11	23	20	50	
1 Sandyford Place, C.3	Yes	30	20	26	26	20	24	20	16	
1107 Gt. Western Road, W.2	—	10	25	1	33	3	23	8	46	
Total		302	469	285	504	218	416	402	816	

Total attendances numbered 163,036 compared with 161,251 attendances in 1965.

Each nursery is visited routinely every fortnight by a medical officer of the Child Welfare staff and any emergency visits are dealt with by medical staff from the Central Office.

TRAINING OF NURSERY STUDENTS.

The scheme of training undertaken by the Health and Welfare Department (in conjunction with Nursery Schools and Further Education Departments) for suitable applicants between 15 and 21 years of age, continues to be very popular. Many girls living in outlying districts apply for residential vacancies, but only a limited number can be accommodated as the Nursery Nurses' Hostel, which accommodates 12 girls, is always full to capacity.

During 1966 there were 159 girls in various stages of the two years' training course for the Nursery Nurses' Certificate. Seventy-nine students sat the Scottish Nursery Nurses' examination and 62 were successful, five with merit.

THE "AT RISK" REGISTER.

Children who have experienced unfavourable conditions in the antenatal, perinatal or postnatal period are notified, as they are considered to be at greater risk of developing a handicapping condition than other children. The purpose of the register is to stimulate health visitors and medical officers to maintain close surveillance over these children. In addition to the central register duplicates of cases notified are kept in the local clinics.

Six children notified in 1963 were still on the register at the end of December, 1966. No further handicap has been reported in the 1963 children.

One hundred and fifty-two children notified in 1964 were still on the register at the end of December, 1966.

Ninety-six children still on the register at the beginning of 1966 had moved outwith the City during the year. There were 11 deaths. Only one death was directly attributable to the "risk" notified. The cause of death was cirrhosis of liver in an infant who had been jaundiced at birth.

Further defects were reported as follows :—

Physical—

Strabismus	...	...	...	...	...	...	10
Cardiac condition	...	...	...	...	...	...	8
Deformity of arm	...	...	...	...	...	...	1
Smallness of one foot and leg	...	...	...	...	...	...	1
Spina bifida with paralysis of lower limbs	...	...	...	...	...	...	2
Cleft palate	...	...	...	...	...	...	2
Hydronephrosis	...	...	...	...	...	...	1
Blood disorder	...	...	...	...	...	...	1
Cavernous angioma	...	...	...	...	...	...	1
Coeliac	...	...	...	...	...	...	1

Mental—

Mentally retarded	4
Mentally retarded ? sl. spasticity	1
Mongol	2
Hydrocephalus with mental retardation (following operation for spina bifida)	2
Petit mal? Brain damage	1

Of the above defects eight had been present when the case was put on the "at risk" register.

Children with defects requiring continuing medical care and/or special educational treatment are transferred to the handicap register.

Four hundred and ten children notified as "at risk" in 1965 were still on the register at the end of December, 1966.

Two hundred and eighty-seven children still on the register at the beginning of 1966 had moved outwith the City during the year. Thirty deaths were notified. Only five deaths were directly attributable to the risk notified. The causes of death in these cases were as follows :—

Congenital heart disease and bronchopneumonia.
 Patent ductus arteriosus and biliary atresia.
 Adreno-genital syndrome.
 Encephalocele.
 Hydrocephalus.

The following defects were reported :—

Physical—

Strabismus	16
Corneal opacity	1
Cataract	4
Nystagmus	1
Cardiac condition	23
Phenylketonuria	2
Histidinaemia	1
Anaemia	1
Von Willebrand's disease	1
Leukaemia	1
Enlarged spleen	1
Hemiplegia	4
Spastic diplegia	2
Meningomyelocele with flaccid paralysis lower limbs	2
Hydrocephalus (one case following operation for spina bifida)	8
Asymmetry of skull	1
Abnormality of orbital ridge	1
Cleft palate and hare lip	1
Syndactylism (hands and feet)	1
Rudimentary fingers	1
Weakness of muscles of one foot	1
Congenital dislocation of hip	1
Atresia of bile ducts	1
Hypospadias	1

Mental—

Simple retardation	...	...	...	...	...	11
Retarded and heart lesion	...	...	...	...	...	3
Retarded and blind	...	...	...	...	...	1
Retarded and nystagmus	...	...	...	...	...	1
Retarded spastic and blind (result of injury)	...	...	...	...	...	1
Retarded spastic and convulsions	...	...	...	...	...	1
Retarded and spastic	...	...	...	...	...	1
Convulsions	...	...	...	...	...	2
Microcephalic	...	...	...	...	...	1
Mongol	...	...	...	...	...	4
Marfan's syndrome	...	...	...	...	...	1

Twenty of the above defects had been present when the case was put on the risk register.

The two cases of phenylketonuria had been diagnosed on routine screening in the neonatal period.

In 1966, 4,367 children were notified as being "at risk." This number is smaller than in 1965, reflecting the lower birth rate.

There were 2,768 children in the single risk group. The numbers in the various risk categories are detailed below :—

Genetic—

Family history of deafness, blindness, epilepsy, C.N.S. defect	...	...	...	...	...	...	66
--	-----	-----	-----	-----	-----	-----	----

Prenatal—

Rubella or other virus infection in first 16 weeks of pregnancy	...	...	...	...	...	...	3
Blood incompatibilities	...	...	...	...	...	...	96
Hyperemesis	...	...	...	...	...	...	22
Threatened abortion	...	...	...	...	...	...	159
Severe illness necessitating chemotherapy or major surgery in early months of pregnancy	...	...	...	...	...	...	4
Thyrotoxicosis	...	...	...	...	...	...	3
Diabetes	...	...	...	...	...	...	7
Toxaemia of pregnancy	...	...	...	...	...	...	352
Multiple pregnancy	...	...	...	...	...	...	100
Other complications of pregnancy, e.g., pyelitis	...	...	...	...	...	...	312

Perinatal—

Prolonged or difficult labour	...	...	...	...	...	798
Prematurity	...	...	...	...	...	450
Postmaturity	...	...	...	...	...	44
Anoxia	...	...	...	...	...	207
Prolonged poor sucking, feeble respiration	...	...	...	...	...	38

Postnatal—

Neonatal jaundice	...	...	...	...	...	31
Convulsions	...	...	...	...	...	21
Cerebral palsy	...	...	...	...	...	—
Otitis media	...	...	...	...	...	—
Presence of other congenital abnormalities, particularly those involving eyes, heart or central nervous system	...	...	...	...	...	42
Meningitis or encephalitis	...	...	...	...	...	3

In addition there were 10 children in a miscellaneous group as follows :—

Conditions in Mother—

Rubella contact (Had received gamma globulin) ...	3
Positive Wassermann	1

Conditions in Child—

Hypoglycemia	1
Subdural haematoma	1
Abdominal distension	1
Generalised oedema	1
Hypothermia	1
Albuminuria	1

There were 1,336 in the two risk group. The numbers in the various risk categories are detailed below :—

Genetic—

Family history of deafness, blindness, epilepsy, C.N.S. defect	37
---	----

Prenatal—

Rubella or other virus infection in first 16 weeks of pregnancy	2
Blood incompatibilities	43
Hyperemesis	11
Threatened abortion	114
Severe illness necessitating chemotherapy or major surgery in early months of pregnancy	15
Thyrotoxicosis	4
Diabetes	9
Toxaemia of pregnancy	408
Multiple pregnancy	143
Other complications of pregnancy, e.g., pyelitis ...	253

Perinatal—

Prolonged or difficult labour	654
Prematurity	338
Postmaturity	73
Anoxia	356
Prolonged poor sucking, feeble respiration	100

Postnatal—

Neonatal jaundice	59
Convulsions	17
Cerebral palsy	1
Otitis media	—
Presence of other congenital abnormalities, particularly those involving eyes, heart or central nervous system	34
Meningitis or encephalitis	—

In addition there was one child whose mother was a rubella contact and had received gamma globulin.

There were 371 children in the three risk group. The numbers in the various risk categories are detailed below :—

Genetic—

Family history of deafness, blindness, epilepsy, C.N.S. defect	11
--	----

Prenatal—

Rubella or other virus infection in first 16 weeks of pregnancy	2
Blood incompatibilities	24
Hyperemesis	6
Threatened abortion	60
Severe illness necessitating chemotherapy or major surgery in early months of pregnancy	6
Thyrotoxicosis	4
Diabetes	1
Toxaemia of pregnancy	143
Multiple pregnancy	71
Other complications of pregnancy, e.g., pyelitis	93

Perinatal—

Prolonged or difficult labour	213
Prematurity	144
Postmaturity	33
Anoxia	178
Prolonged poor sucking, feeble respiration	60

Postnatal—

Neonatal jaundice	32
Convulsions	12
Cerebral palsy	—
Otitis media	—
Presence of other congenital abnormalities, particularly those involving eyes, heart or central nervous system	20
Meningitis or encephalitis	—

There were 78 children in the four risk group. The numbers in the various risk categories are detailed below :—

Genetic—

Family history of deafness, blindness, epilepsy, C.N.S. defect	3
--	---

Prenatal—

Rubella or other virus infection in first 16 weeks of pregnancy	1
Blood incompatibilities	6
Hyperemesis	3
Threatened abortion	23
Severe illness necessitating chemotherapy or major surgery in early months of pregnancy	1
Thyrotoxicosis	—
Diabetes	1
Toxaemia of pregnancy	29
Multiple pregnancy	22
Other complications of pregnancy, e.g., pyelitis	35

Perinatal—

Prolonged or difficult labour	38
Prematurity	38
Postmaturity	5
Anoxia	43
Prolonged poor sucking, feeble respiration	33

Postnatal—

Neonatal jaundice	...	...	...	...	...	...	13
Convulsions	...	...	...	...	...	...	4
Cerebral palsy	...	...	...	...	...	...	—
Otitis media	...	...	...	...	...	...	—
Presence of other congenital abnormalities, particularly those involving eyes, heart or central nervous system							6
Meningitis or encephalitis	...	...	...	...	...	...	—

There were 14 children in the five risk group. The numbers in the various risk categories are detailed below :—

Genetic—

Family history of deafness, blindness, epilepsy, C.N.S. defect	...	...	...	...	...	...	2
--	-----	-----	-----	-----	-----	-----	---

Prenatal—

Rubella or other virus infection in first 16 weeks of pregnancy	...	...	...	...	...	...	—
Blood incompatibilities	...	...	...	...	...	...	2
Hyperemesis	...	...	...	...	...	...	1
Threaten abortion	...	...	...	...	...	...	8
Severe illness necessitating chemotherapy or major surgery in early months of pregnancy	...	...	...	...	...	...	—
Thyrotoxicosis	...	...	...	...	...	...	—
Diabetes	...	...	...	...	...	...	—
Toxaemia of pregnancy	...	...	...	...	...	...	5
Multiple pregnancy	...	...	...	...	...	...	3
Other complications of pregnancy, e.g., pyelitis	...	...	...	...	...	...	4

Perinatal—

Prolonged or difficult labour	...	...	...	...	...	...	8
Prematurity	...	...	...	...	...	...	9
Postmaturity	...	...	...	...	...	...	2
Anoxia	...	...	...	...	...	...	12
Prolonged poor sucking, feeble respiration	...	...	...	...	...	...	9

Postnatal—

Neonatal jaundice	...	...	...	...	...	...	4
Convulsions	...	...	...	...	...	...	—
Cerebral palsy	...	...	...	...	...	...	—
Otitis media	...	...	...	...	...	...	—
Presence of other congenital abnormalities, particularly those involving eyes, heart or central nervous system							1
Meningitis or encephalitis	...	...	...	...	...	...	—

In 1966, 176 of the children notified had moved outwith the City. Seventeen children had moved and their new address was unknown.

Thirty-nine deaths were notified. Only six deaths were directly attributable to the "risk" notified. The causes of death in these cases were as follows :—

Cardiac failure	...	...	...	...	...	...	3
Congenital cardiac condition	...	...	...	...	...	...	2
Dyshormonogenesis (Thyroid)—post operation	...	...	...	...	...	...	1

The following defects were reported :—

Physical—

Cardiac condition	...	...	...	...	...	1
Hydrocephalus and flaccid paralysis of lower limbs (following operation for spina bifida)	...	...	...	...	...	1

Mental—

Mongol	...	...	...	...	...	...	...	...	1
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The cardiac case and the mongol were notified at birth.

A review of cases notified in 1966 will commence in 1967.

HANDICAP REGISTER.

A central register is kept which records the names and addresses of children with disabilities which are likely to require special medical, educational or social provisions. Notification to the register is made by the health visitors. In 1966 there were three hundred and nine children notified.

Since notification seven children have died and thirteen have left Glasgow. Age at notification was as follows :—

AGE AT NOTIFICATION.

—7 days	...	...	...	...	5
8—28 days	...	...	...	...	22
29 days —1 yr.	...	...	...	...	99
—2 yrs.	...	...	...	...	72
—3 yrs.	...	...	...	...	41
—4 yrs.	...	...	...	...	35
—5 yrs.	...	...	...	...	35
					309

The types of defect notified were as undernoted :—

MENTAL DEFECT.

Mental retardation	...	...	...	...	47
Mongol	...	...	...	...	36
Microcephaly	...	...	...	...	6
Hydrocephalus	...	...	...	...	15
Oxycephaly	...	...	...	...	1
Epilepsy	...	...	...	...	12
Aphasia	...	...	...	...	4
Phenylketonuria	...	...	...	...	3
Brain damage	...	...	...	...	1
Cretin	...	...	...	...	1
Brain tumour	...	...	...	...	1
Gargoylism	...	...	...	...	2
					129

PHYSICAL DEFECT.

Spina bifida and meningocele ...	17
Congenital limb deficiency ...	9
Hare lip and cleft palate ...	6
Cleft palate ...	8
Hare lip ...	2
Talipes ...	17
Congenital heart lesion ...	36
Congenital dislocation of hip ...	6
Cerebral palsy ...	26
Hypotonia ...	1
Muscular dystrophy ...	3
Visual defect ...	7
Blindness ...	2
Deafness ...	6
Speech disorder ...	2
Mucoviscidosis ...	1
Celiac disease ...	4
Adrenal hypoplasia ...	2
Kidney abnormality ...	2
Abnormality of external genitalia ...	1
Amputation of arm ...	1
Achondroplasia ...	2
Perthes' disease ...	2
Christmas disease ...	1
Diabetes ...	2
Atresia of bile duct ...	1
Chromosome Defect ...	1
	168

MULTIPLE DEFECTS.

Hydrocephalus and spina bifida ...	5
Hemiplegia and mental retardation ...	2
Blind and mentally retarded ...	2
Mongol with spina bifida ...	2
Mental retardation plus talipes ...	1
	12

Congenital defects which are readily recognised and easily diagnosed tend naturally to be notified early. The classic example of this is mongolism. Physical defects which are notified soon after birth are hare lip and cleft palate, Spina bifida and limb defects. Mental retardation may not be apparent until the child's slow progress brings it to notice.

The age at which congenital heart conditions are recognised varies. Cyanotic heart disease may be noted shortly after birth but other types may escape discovery until later when they are found on routine examination at Child Welfare clinics or during consultation for an intercurrent illness. There were only four cases of cerebral palsy notified under the age of one year. Three of these were of a severe type.

It is possible to treat certain types of congenital defect early so that the child ceases to be handicapped but there were no names removed from the register for this reason during 1966.

REPORT ON THE ASSESSMENT AND ADVISORY CENTRE, GLENFARG STREET, N.W.

One hundred and twenty-nine sessions were held at the Centre in 1966. Eighty-four children were referred to the Centre in 1966. Children are always seen by appointment and the appointments are made by the health visitor. On her initial visit to make the first appointment the health visitor can make some assessment of the social back-ground and family attitudes. This visit is also of value in allaying the parents' anxieties regarding the impending visit to the Centre.

Children were referred from the following sources :—

Hospital Paediatricians	...	...	...	...	11
Family Doctors	...	...	...	...	3
Child Welfare Medical Staff	...	...	...	...	66
Transfer from Balvicar Centre	...	...	...	...	1
Audiology Unit	...	...	...	...	1
Education Health Service Child Psychologist	...	...	...	...	1
Hospital Medical Social Worker	...	...	...	...	1

In addition to cases seen at the Centre two children were seen in hospital.

SUMMARY OF CONDITIONS SEEN.

Normal	...	...	...	...	...	9
General developmental delay	...	...	...	...	...	6
Developmental speech disorder	...	...	...	...	...	5
Retarded (Non-specific)	{ Severe 4 Moderate 7 Slight 15 }					26
Mongol	...	...	...	...	...	9
Minimal Cerebral damage	{ Normal intelligence 2 Slightly retarded 2 }					4
Cerebral diplegia	{ Severely retarded 2 Slightly retarded 3 }					3
Cerebral palsy (mainly affecting spinal muscles)— Slightly retarded	...	...	...	...	...	1
Hemiplegia with severe mental retardation	...	...	...	...	...	2
Microcephalus	{ Severely retarded 3 Slightly retarded 2 }					5
Hydrocephalus	{ Normal intelligence 1 Slightly retarded 2 }					3
Spina bifida—Normal intelligence	...	...	...	...	...	1
Epilepsy	{ Normal intelligence 2 Slightly retarded 1 }					2
Infantile spasms—Severely retarded	...	...	...	...	...	3
Behaviour disorder—Normal intelligence	...	...	...	...	...	1
Hypertelorism—Normal intelligence	...	...	...	...	...	1
Bilateral Nerve deafness	...	...	...	...	...	1
Pierre-Robin syndrome—Slightly retarded	...	...	...	...	...	1
Coeliac Disease—Normal intelligence	...	...	...	...	...	1

The nine children classed as normal were referred for a variety of reasons, e.g., prior to adoption, retarded sibling.

Six children were classed as developmental delay rather than retarded as it was felt that this delay might be temporary and that a further period of observation was required before a definite decision could be made.

The above two groups illustrate an important part of the work of the Centre. This is to observe and assess children showing deviation from the normal pattern of development.

In a proportion of children so referred it may ultimately be decided that the deviation falls within the normal range but in others the deviation may be significant and lead to early diagnosis of handicap.

There is always a certain number of children referred with delayed or imperfect speech development. If no underlying cause such as impaired hearing or mental retardation is found these cases are classed as developmental speech disorder.

All the handicapped children are reassessed regularly. Counselling of parents continues to be an important part of the work of the clinic. Clinic visits are supplemented by home visits made by the health visitors attached to the clinic. There are now a number of families with more than one retarded child attending the Centre. The families belong to the "subcultural" group and present many medical and social problems. Supervision of these families and mobilising help for them can take up a disproportionate amount of the health visitor's time.

Cases which present difficulty in diagnosis are seen by Professor Hutchison and if further investigation is needed are admitted to his ward. Dr. Schaffer, lecturer in psychology, Strathclyde University, has attended for informal case conferences since the Centre was opened. In the past year he has had increasing commitments in the University and the case conferences have not been on such a regular basis as formerly.

From the Assessment Centre in 1966 there were four new admissions to Broomhill Special Nursery, nine new admissions to day nurseries and two new admissions to nursery school. Children for the ordinary day nurseries and nursery schools have to be carefully selected, so that they are not a disruptive influence. Only a few children can be placed as there are many other demands for nursery accommodation. The children benefit considerably from the social and educational training

provided by day nurseries and nursery schools. We continue to be indebted to the Association for the Mentally Handicapped for admitting children to the Day Centre at Laurieston House and also for residential care at Stewart Home, Cove.

As children approach school age they are seen by a Senior Medical Officer of the School Health Service. The probable school placing of the child is discussed and an explanation of the type of training or education given. This consultation provides a good introduction to the School Health Service.

The policy of fostering selected handicapped children from one of the Children's Department Homes has been continued. These children are supervised at the Centre after placing. Physical and psychological progress of the children has been satisfactory.

Several parents' meetings were held during the winter months. Discussion follows a short talk or film. Parents enjoy meeting together and discussing their mutual problems and anxieties. Such meetings can be a source of comfort and support.

THE BALVICAR CHILD DEVELOPMENT CENTRE.

The Centre has now been open for two years. During the past year the intake of new patients has continued steadily and the secondary visits have consequently increased in number. Parents keep the appointments well and often phone to apologise or explain when they have to cancel a visit.

	Male	Female	Total
No. of New Cases	47	34	81
Total No. of Cases on Register	90	67	157
No. of Subsequent Visits ...	183	108	291

Of the 81 new cases, two were transferred from the Assessment Centre at Glenfarg Street and the others were referred from the following sources :—

	Male	Female	Total
General Practitioners	6	8	14
Child Welfare Medical Officers	31	19	50
School Health Service (including Audiologist and Child Guidance Clinics)	7	4	11
Hospitals	2	—	2
Children's Department	1	—	1
R.S.P.C.C.	—	1	1

Analysis of Cases—

	Male	Female	Total
Physical Handicap	8	5	13
Mental Handicap... ..	14	12	26
Behaviour Handicap	2	3	5
Social Handicap	—	1	1
Physical + Mental Handicap ...	6	3	9
Behaviour + Mental Handicap ...	—	2	2
Social + Mental Handicap ...	3	3	6
Social + Physical Handicap ...	1	—	1
Behaviour + Physical Handicap	6	—	6
Behaviour + Social Handicap ...	—	1	1
Behaviour + Mental + Physical Handicap	3	—	3
Social + Mental + Physical Handicap	1	—	1
Social + Mental + Behaviour Handicap	2	1	3
Social + Physical + Behaviour Handicap	—	1	1
Social + Mental + Physical + Behaviour Handicap	—	—	—
No Handicap detected	1	2	3
	<u>47</u>	<u>34</u>	<u>81</u>

Diagnoses—

Cerebral Palsy	...	...	...	4
Spina bifida/Hydrocephalus ...	...	...	...	5
Minimal Cerebral Dysfunction (including Dysphasia, Hyperkinesia) ...	...	...	...	17
Epilepsy	...	...	...	2
Mental Retardation	...	...	...	28
Down's Syndrome (Mongolism) ...	...	...	...	7
Blind	...	...	...	2
Partially Sighted	...	...	...	1
Schonberg's Disease	...	...	...	1
Retinoblastoma	...	...	...	1
Visual Defects	...	...	...	12
Talipes Equinovarus	...	...	...	1
Deaf	...	...	...	1
Physical Defect (other than main handicap, e.g., Anaemia, Malnutrition)	...	...	...	5
Emotional and Behaviour Disturbances	...	...	...	14
Adverse Environmental Conditions	...	...	...	10
No Handicap Detected	...	...	...	3

All the children attending receive routine screening of vision and hearing, as well as psychological testing. This procedure enables additional handicaps to be unmasked and treated.

Consultants.—As will be seen from the appended figures, the Consultant service has been fully utilised. The Consultants have shown a willingness to attend and have also recognised the problems encountered. To enable these consultations to proceed in as relaxed an atmosphere as possible, methods of orientation to play have been adopted. By such methods the examination of the very young child can be conducted with less stress. In cases of recalcitrant behaviour the observation window and sound transmitting apparatus can be employed.

<i>Visits by—</i>	Male	Female	Total
Paediatrician	33	15	48
Orthopaedic Surgeon	38	19	57
Neurologist	10	4	14
Ophthalmologist	44	32	76
Otologist	2	4	6
Dentist	5	1	6
Psychologist	49	26	75
(Griffiths Assessments carried out by Medical Officer at Centre)	16	13	29
Audiologist	54	30	84
	<u>251</u>	<u>144</u>	<u>395</u>

	Male	Female	Total
No. of Children advised to wear glasses	7	5	12
No. of Children referred for treat- ment to Glasgow Eye Infirmary	5	2	7
No. of Children referred for Physi- otherapy	5	5	10
No. of Children referred for Dental Treatment	1	1	2
No. of Children admitted to Nurs- ery School or Day Nursery ...	4	5	9
No. of Children admitted to Day Care Groups	9	5	14
No. of Children admitted to Short Stay Homes	7	5	12

Play Therapy Sessions.—These groups have proved their worth and have had to be augmented. Parents have expressed appreciation of this work and value the support and guidance offered. Thirty new cases were admitted to groups during the year, making a total of 45 children attending; the total number of attendances was 476.

The Health Visitor at the Centre has also paid 288 home visits during the year. It will be noted that this is a considerable increase from the previous year and this, too, contributes much to the work of the Centre.

Special Day Nursery.—There is an evident demand for this form of child care. The policy adopted is to train the handicapped child and this training can only be achieved over long periods of attendance at the Nursery. This means that the Nursery cannot accept many new admissions and consequently the waiting list is growing. Sixteen new patients were admitted during the year and 20 dismissed.

Analysis of Dismissals.—Thirty-four children were discharged from our records during the year. As will be seen from the following figures, most children can be directed into one of the recognised channels for education.

	Male	Female	Total
Ordinary School	2	7	9
Special School	2	1	3
Occupational Centre	3	1	4
Unfit for education or training ...	3	3	6
Nursery Class—Parkhouse School	1	—	1
Nursery Class—Kelbourne School	1	—	1
Kelvin School (while on waiting list for Royal Blind School) ...	1	—	1
Problem resolved : Did not wish to return	3	2	5
Removed outwith area	—	2	2
Died	2	—	2

Teaching and Research.—This is an important part of the work of the Centre and the practical aspect appeals to the students. As a result of study of developmental paediatrics, much material is available for research. The concentration of this information in one centre should prove valuable for future projects.

Lectures at the Centre were given to members of the Society of Medical Officers of Health ; Medical Officers undertaking the D.P.H. Course ; Student Health Visitors ; and Health Visitors undertaking the Course in Mental Health.

Parents' Meetings.—The parents' evening meetings have been enthusiastically attended. Such subjects as educational placing and the future of the handicapped adolescent have been dealt with by a panel of expert . Discussion with Consultants and films have added to the interest of these evenings. Parents' own contributions have been most successful. The staff regard these meetings as part of their duties and endeavour as far as possible to maintain a friendly and informal atmosphere. It is only the parents and relatives of the children who are invited, as these meetings are not open to the public.

Lectures.—The Medical Officer and Health Visitor at the Centre have been frequently invited to lecture to both professional and lay bodies. It is hoped in this way to promote more enlightened attitudes in the community and to make known the need for early referral. The films and slides prepared by the Health Education Officer have been most useful. As a result of these talks, the Centre has received many useful gifts of clothing and toys, including a fine collection of "Gonks" made by Brownies.

Visitors.—As in the previous year, the pioneering nature of the work has attracted many visitors to the Centre. It will be seen from the undernoted list that interest in developmental paediatrics is widespread and that Local Authorities are aware of the necessity to provide these services for the pre-school handicapped child. These visitors have been conducted over the building and the staff have endeavoured as far as possible to find time to demonstrate the work of the Centre.

Visitors included :—

Medical Officers from overseas, Wales, Edinburgh, Lanarkshire and Renfrewshire, as well as Glasgow.

Student Health Visitors from overseas, London University and Edinburgh.

Medical Officers and Nursing Staff from Home and Health Department, Edinburgh.

Head Teachers and Senior Assistants of Special Schools and Occupational Centres, Glasgow.

Psychiatric Social Workers from Strathclyde University and Glasgow Hospitals.

Representatives of Local Authority, Birmingham.

Mrs. Wolridge Gordon and two Mental Welfare Officers from U.S.A.

Mrs. Peggy Macrae, Mrs. Forrest and other officials from Voluntary Societies for the Handicapped.

Miss Meg Munro ("Evening Times") and two lady journalists from U.S.A.

Conclusion.—The Centre and the staff are now dealing with more patients than can be comfortably managed. Without the help of a small group of voluntary workers, the staff could not adequately deal with so many children. These ladies assist with Play Therapy sessions and work under the supervision of the trained therapist. Some offer transport to convey patients, so that mothers can keep appointments,

and others temporarily relieve a mother by caring for the other members of the family. This is a valuable contribution and is greatly appreciated by parents and staff.

This type of work imposes strain, nevertheless, there is much satisfaction to be obtained from assisting these children to develop their skills and reach their potential. In order to do so, expert help must be available at the optimum time. Delay at any stage must be avoided so that the waiting lists for the Special Day Nursery or the Play Therapy sessions become a challenge for the future.

THE SOCIAL PAEDIATRIC RESEARCH GROUP.

"Increasingly, it is in the home, the family and the everyday way of life where we may have to look for the basic deficiencies which are leading to ill-health."

—GUILLEBAUD COMMITTEE (1956)

The Group was established in March, 1966 by the Department of Child Health of the University of Glasgow and the Health and Welfare Department to study the socio-medical problems of infancy and childhood in Glasgow.

The University, with a grant from the Scottish Hospital Endowments Research Trust, provides the salary of a Senior Lecturer in Child Health who is in charge of the Group (I.D. Gerald Richards, M.D., D.P.H.), a Research Nutritionist (Elaine C. Taylor, B.Sc.) and a personal secretary (Margaret I. Tinning). The Corporation has seconded a member of its medical staff (Frances M. W. Hamilton, M.B., Ch.B., D.P.H.) and provides accommodation in the Health and Welfare Department and office equipment. It also provides free use of its facilities in respect of clerical records work, card punching and computing and the resources of its clinic buildings and personnel where these are needed for research. The salaries of two further members of the Group—an interviewer (Muriel Donald, M.A.) and a computer programmer (Esther Granick, B.A.)—are provided by the Nuffield Provincial Hospitals Trust.

On its formation, Dr. Alwyn Smith was appointed Senior Lecturer in charge of the Group. He left in March, 1967 to occupy the Chair of Social and Preventive Medicine at Manchester University and has been succeeded by Dr. Richards who was formerly Lecturer in Social Medicine at the Welsh National School of Medicine, Cardiff. While head of the Group, Dr. Smith published "Genetics in Medicine" (Livingstone, Edinburgh).

Research Projects.—The establishment of the Group under the joint sponsorship of the University and Corporation of Glasgow created a situation which is probably unique in epidemiological research. The direct access afforded to the records of a large well-defined child population has influenced the choice of an appropriate programme of research and this is being exploited in the development of a computerised record-linkage system for child health records using the Corporation's I.B.M.360/30 computer. The reappearance of florid rickets in Glasgow (Arneil and Crosbie, 1963) has prompted a search for subclinical signs of subnutrition. Continuing high perinatal mortality rates and evidence from previous studies that selection of cases for hospital delivery in Glasgow is substantially independent of the social and domestic circumstances of the mother and her previous obstetric history (Smith and Macdonald, 1965) have led to an investigation of maternal attitudes to the maternity services and their utilisation of these services.

(1) *Development of a computerised record-linkage system for child health records.*

The system is being established to make available for research purposes the data that are placed on record by the Child Welfare and associated services. It will permit longitudinal studies on a whole natural population of children and will facilitate greatly the analysis of data for annual and interim reports by the Medical Officer of Health. The system involves a file of records, each relating to an individual child, started at birth and maintained for several years thereafter and up-dated by each report on that child available to the Local Health Authority.

The project involves three phases—the design of suitable data-recording documents, the design of a computerised file procedure with document identification and linkage systems, and of a means of access to the record files for retrieval and assembly of data and for their analysis. The first phase has involved the redesign of basic documents for the recording of birth notification data and abstraction from birth registration data, death records and health visitor records. These documents are being completed for all births to Glasgow residents occurring since the beginning of 1967. The health visitor record card (containing valuable data on nutrition, development and social conditions in the first $4\frac{1}{2}$ years of life) is being restructured in a form suitable for use as a punching document. Other documents also, e.g., immunisation records and registrations

of handicapped children, are being redesigned for inclusion in the system.

The initiating record (combining data from the birth notification and registration) contains several different identification items so that up-dating may be carried out even if subsequent records are incomplete. The basis of a logical decision procedure for probability matching has been designed for the cases where conventional identifying data are too incomplete to permit simple linkage.

(2) *Nutrition studies.*

A preliminary study of a small random sample of children between 12 and 24 months was conducted in 1966. They were investigated by dietary interview, clinical examination, wrist radiography and estimation of serum alkaline phosphatase and haemoglobin level. Of 202 children studied, only 136 (67 per cent.) were judged to have an adequate dietary intake of vitamin D. The significance of certain radiographic abnormalities found during this study is being investigated further among a random sample of five hundred children. The diets of those with such changes and of a series of controls are being studied in detail.

The results of the first phase of the investigation were communicated to the Society for Social Medicine by Frances Hamilton and Elaine Taylor.

(3) *Investigation of determinants of the utilisation of maternity services.*

This study is being conducted along two lines.

- (a) A statistical analysis of all births in 1967 to relate the place of confinement and outcome of pregnancy to maternal age, parity, social circumstances, type of antenatal care used, whether booked or not and the stage of pregnancy at which antenatal care commenced.
- (b) Investigation by questionnaire and record search of a five per cent. sample of legitimate births in 1967 to examine the use made of the obstetric services in relation to the mother's domestic and social circumstances (including the number of children and the availability of domestic and child-minding help) and her attitude to child-bearing and to the maternity services.

In all these researches the Group has received most valuable help from the Health Department's medical, health visiting, dietetic and clerical staff, from the Corporation's Computer Department, and from the staff of the Royal Hospital for Sick Children.

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RESIDENTIAL HOMES AND NURSERIES.

SHORT STAY NURSERIES.

There are two Short Stay Nurseries, one at Glenrosa, 47 Maxwell Drive, and the other at 9 Winton Drive. These Nurseries care for children under the age of five years whose mothers are in hospital. The maximum duration of stay is one month.

During 1966 there were 345 admissions to Glenrosa and 373 to Winton Drive. The overall number of admissions was slightly larger than in 1965. The service is in constant demand and is much appreciated by those who require to use it.

CARNBOOTH HOUSE.

During 1966 there were 169 admissions to this Home. All the children were admitted for a period of general care in good surroundings. The children were recommended by Medical Officers at Child Welfare centres. There were no admissions for segregation before and after B.C.G. vaccination.

The number of admissions was lower in 1966 than in the preceding year. This was not due to lack of demand but because fairly extensive alterations were carried out in 1966 and the number of admissions had to be reduced when some rooms were out of commission.

Most of the children admitted came from a poor social environment. In many cases the mother had poor physical or mental health and was unable to give adequate care.

This large house is set in spacious grounds which provide ample opportunity for outdoor play. The children benefit considerably from good diet and regular routine and also from exercise in the open air.

SCOTSTOUN HOME.

The number of admissions to this Home in 1966 was 97. The Home is still situated in the premises of the upper flat of 1107 Great Western Road. The premises are rather cramped and it is difficult to arrange out-door activities for the children. Despite this the children do show improvement as a result of nursing care, good diet and regular routine.

MILLBRAE HOME.

The total number of children admitted to this Home in 1966 was 87. Twenty-two neonates were admitted from hospital for segregation following B.C.G. vaccination. Five children under the age of two years were tuberculosis contacts. These latter children remained in the Home for six weeks before and six weeks after B.C.G. vaccination. The remaining 60 children were referred for a period of convalescence either by Child Welfare Medical Officers or hospital almoners. There has been a reduction in the number of children admitted for segregation and B.C.G. vaccination. This has been counterbalanced by the increased number admitted for convalescence.

Some of the City hospitals are making increasing use of Millbrae Home for the aftercare of babies who do not require further hospital investigation but do need a period of good nursing care before they are fit to return home. Many of these babies have been admitted to hospital because of failure to thrive due to maternal neglect and incompetence.

Most of the infants are very underweight on admission and improve markedly during their stay. In addition to physical improvement there is psychological improvement. Many of the babies are apathetic on admission not only due to their poor physical state but also because of emotional deprivation. The warm sympathetic handling they receive makes them much more alert and responsive.

CHILDREN'S DEPARTMENT HOMES.

The medical care of children in Eversley, Lochgarry and Castlemilk has been undertaken by local general practitioners since January, 1966.

Quarterly visits were paid to the above homes in addition to Blairvadach, Corrybeg and Lochaber for administrative purposes.

Eglinton is still supervised by a senior member of the Child Welfare medical staff. This home has a high proportion of mentally handicapped children. Also a number of babies are admitted because they have

an adverse perinatal or neonatal history and require a period of observation before a decision about their future is reached. For these reasons it was felt that the medical officer for this home should have experience in dealing with handicapped children and also of developmental assessment. All the children are examined on admission to the home and regular medical supervision is provided. In addition to providing a general practitioner service for each child the medical care includes general supervision of the home from the point of view of general hygiene and control and prevention of infection.

NURSERIES AND CHILD MINDERS' REGULATION ACT, 1948.

This Act, which came into operation in August, 1948, provides for the registration of certain premises and of persons who, for reward, receive and look after children in their own homes.

Ten applications were received throughout the year for the registration of nurseries, play groups, etc. After inspection, nine registrations were granted and added to the central register.

The last application received is awaiting approval and should be passed early next year. Four nurseries closed down leaving at the end of December, 1966, a total of 30 registered private nurseries providing accommodation for 617 children under school age, an increase of 164 on last year's total.

All the premises were visited throughout the year and each was found to conform to the required standards.

HEALTH VISITING SERVICE.

The number of Health Visitors is a variable one. At the end of 1966 the number of persons on the staff was 223, 24 having left during the year ; some to go abroad, some to other posts and some unfortunately because they cannot get a house in Glasgow. Of this total, 145 were Child Welfare Health Visitors and 22 Tuberculosis Health Visitors.

There was a very big Polio Campaign in April, May and June directed at those children under two years who had not been protected. This, in some areas, entailed a great deal of work which the Health Visitors very willingly undertook, manning the mobile units throughout the City and visiting on their districts in the evenings when this seemed to be the only time to find the families at home.

The longitudinal survey originally instituted by Dr. Stott was continued during the year although he himself has gone to Canada.

Dr. Schaffer of Strathclyde University expressed his gratitude to the Health Visitors for the information provided for his "Children going into Care" survey which finished in 1966.

Five more Child Welfare Health Visitors were trained to be Field Work Instructors.

There was no Mental Health Course during the year.

Hospital Student Nurses were given an insight into the work in the Health and Welfare Department; tutors and some of the Health Visitors gave lectures and the student nurses accompanied Health Visitors on the district thus seeing something of the social conditions.

Particular attention was devoted to the prevention of accidents in the home and the use of fireguards, the need for which is constantly stressed.

The staff continue to give willingly of their time to address members of the Red Cross, Girls' Brigades, Woman's Guilds, etc.

HEALTH AND TUBERCULOSIS VISITING.

The following table shows the number of home visits and cases attended by the Health Visiting staff in 1966 :

NUMBER OF HOME VISITS AND CASES.

Visited by Health Visitors, i.e., Certificated Health Visitors and others doing health visiting work							Number of cases	Number of visits
1.	Expectant Mothers ...	...	...	...	...	...	1,853	2,774
2.	Children born in 1966	...	...	...	...	...	19,775	79,936
3.	Children born in 1965	...	...	...	...	...	19,143	67,762
4.	Children born 1960-64	...	...	...	...	...	52,763	108,702
5.	School children ...	...	...	...	...	...	12,650	13,533
6.	(a) Persons aged 65 and over	...	...	...	...	...	201	490
	(b) Persons included above who were visited at the special request of a general practitioner or hospital						38	51
7.	(a) Mental Health : care and after-care	...	...	...	...	...	1,193	7,260
	(b) Persons included above who were visited at the special request of a general practitioner or hospital						1,193	7,260
8.	(a) Other hospital after-care	...	...	...	...	...	9	9
	(b) Persons included above who were visited at the special request of a general practitioner or hospital						4	4
9.	Tuberculous households	...	...	...	...	...	9,611	28,681
10.	Other infectious diseases	...	...	...	...	...	318	737
11.	Other ...	...	...	...	...	...	1,589	1,635
Total							120,340	318,834

HEALTH VISITOR TRAINING CENTRE.

There were thirty-eight students selected for Health Visitor Training for the 1965/66 Course. Of this number seventeen were sponsored by Glasgow Health and Welfare Department and nineteen by other Local Authorities throughout Scotland. One student received an Education Grant and there was one independent student from Nigeria.

This was the first year of training under the new syllabus issued by the Council for the Training of Health Visitors in 1964, an important landmark in the history of Health Visiting.

The new syllabus of training and system of field work instruction has been devised to prepare the student to meet the demands of health visiting at the present time and in the future. The syllabus allows for considerable flexibility of interpretation in individual training schools.

The curriculum and field work arrangements of the Course prepared in accordance with the Council requirements, were examined by the Education Committee of the Council and approval granted.

Adjustments in the lecture programme laid greater emphasis on sociology and psychology. For the main series of lectures, the school was fortunate in having an excellent team of lecturers from the University of Glasgow, the University of Strathclyde and from the Department itself.

Field work instructors were specially selected and appointed to be responsible for the practical training of students working under the direction of, and in close co-operation with, the Training School staff. Five of these experienced Health Visitors attended the first Course for Field Work Instructors in Scotland at Helensburgh in April, 1965 and another five a similar Course in St. Andrews in 1966.

Each student had to present four family studies as part of the final examination. The students were required to study these families throughout the Course which provided the opportunity for them to deepen their understanding of family visiting. The studies are intended to indicate the students' development in understanding of health visiting during the period of training. In addition each student was required to undertake and present a project on a particular aspect of the work of the Health Visitor.

The Training School staff was responsible for making arrangements for the qualifying examination which was held during June and July, 1966. The Examination Board consisting of the Internal Examiners,

the External Examiners and Tutors to the Course met in April, 1966. The Internal Examiners were all lecturers who had taken part in the theoretical programme. Miss D. J. Lamont, Director of Advanced Nursing Education, Aberdeen, and Dr. H. P. Tait, Principal Medical Officer for Maternity and Child Welfare, Edinburgh, acted as External Examiners.

Thirty-six students were successful in the Examination and were awarded the Certificate of the Council for the Training of Health Visitors.

Three students passed with distinction.

The presentation of prizes and Training School certificates was made by Dr. N. I. Wattie, O.B.E. The function was presided over by the Medical Officer of Health, Dr. W. A. Horne.

PUBLIC HEALTH TRAINING OF STUDENT NURSES.

In continuance of the recommendations made by the General Nursing Council for Scotland pertaining to nurse training, student nurses from the general hospitals in the City were seconded for three weeks' experience in public health. As commenced in 1965, theoretical training was given in the school at 3 Lancaster Crescent and practical work was arranged in co-operation with the various branches of the Health and Welfare Department. The organisation of the courses continues to be carried out by the tutorial staff of the Health Visitor Training School. The secondments commenced in August, 1965, making 1966 the first full year of this venture. Throughout the year 399 student nurses completed the form of training.

DOMICILIARY MIDWIFERY SERVICE.

In 1966 the number of registered midwives practising in the City was 111. Of these 77 were full-time domiciliary midwives in the service of the Corporation and 7 part-time; included in this number are the Chief Supervisor and nine Assistant Supervisors. The introduction of part-time midwives has been most successful. The 7 now employed are fully trained and qualified and have carried out their duties in an excellent manner. Of the remainder 18 were Queen's Nurses engaged in full-time midwifery and other 9 midwives were variously employed—8 in association with maternity homes and 1 in private practice.

The Corporation midwifery service has, since its inception in 1940, been very popular with Glasgow mothers and many of them, having experienced the advantages of this service during their first confinement,

now readily book a Corporation midwife for their second and subsequent pregnancies. Far too many women, however, delay booking a midwife for the approaching confinement until well into the seventh or eighth month. In 1966 of the 4,201 booked applications, 635 were not made till the seventh and 411 till the eighth month of pregnancy. No less than 123 applications were made as late as the ninth month. This militates against the mother receiving adequate antenatal care and sufficient mothercraft teaching from the midwives.

During the year the municipal midwives attended 2,393 cases, paying 25,297 antenatal visits and 35,184 during the puerperium, while the Queen's Nurses attended 546 cases, to whom they paid 14,422 visits.

A supervisor is always on duty, day and night, to deal with emergency calls and/or arrange for admission to hospital. The close co-operation which exists between the hospitals and district staff is invaluable in an emergency and is very much appreciated. In addition, a considerable part of the work of the supervisors is the general supervision of midwives under the Midwives (Scotland) Act, 1951, and the inspection of the patients' homes with regard to their suitability for a confinement. All midwives are encouraged to report cases where the house is only a single apartment or overcrowded, so that arrangements may be made for the confinement to take place in a hospital. Where necessary the aid of the Department's disinfecting staff is invoked to have the houses sprayed or disinfected and washing done prior to the confinement taking place—a much appreciated service.

Maternity outfits are available on application for women who are to have a home confinement and 3,954 of these, costing 15s. 6d. each, were issued free of charge in 1966.

The introduction of these sterilised dressings has been of the greatest benefit to both patient and midwife, not least as a practical demonstration of the value of personal hygiene.

Gas and Air Analgesia and Trilene can now be administered by midwives to those patients certified by their doctors as requiring it. Only midwives duly certified by the Central Midwives' Board as being properly qualified to administer such analgesics are permitted to do so.

The domiciliary staff also undertake the training of pupil midwives from the maternity units of the following hospitals :—Stobhill, Southern General, Glasgow Royal Maternity Hospital, Queen Mother's Hospital, Eastern District, Robroyston and Redlands. The scheme provides

that there is always a domiciliary midwife at each confinement. For this training 59 of the midwives are approved by the Central Midwives' Board. During the year 357 pupils from the above hospitals attended 1,810 confinements and made 14,011 puerperium and 5,713 antenatal visits. Training of pupil midwives is also carried out by the District Nursing Association and reference to this will be found in the Home Nursing Section of this Report.

Post-graduate courses for midwives are held each year in one or other of the larger cities and twenty-one midwives are authorised to attend.

The following table shows the work carried out by the midwives during 1966.

Number of births classified to show nature of attendance at birth :—

Cases dealt with under Section 23 (2) of
the National Health Service (Scotland)
Act, 1947.

	Doctor present at actual confinement	Doctor present at any time during Labour	Doctor not present at any time	Midwife alone (no doctor engaged)	Total
(a) Midwives employed by the Authority	1,162	398	784	49	2,393
(b) Midwives employed by voluntary organisations	226	284	36	—	546
(c) Total	<u>1,388</u>	<u>682</u>	<u>820</u>	<u>49</u>	<u>2,939</u>

Fees to doctors attending emergency cases amounted to £13 4s. 6d.

CASES OF PUERPERAL FEVER OCCURRING IN THE PRACTICE OF MIDWIVES.

Year	Midwives	Cases Notified
Average 1939-45	33	45
Do. 1946-50	25	33
Do. 1951-55	5	5
Do. 1956-60	2	2
1961	—	—
1962	1	1
1963	1	1
1964	—	—
1965	—	—
1966	—	—

OPHTHALMIA NEONATORUM.

The number of cases of ophthalmia neonatorum notified during 1966 was 21.

The cases were classified as follows :—

Gonococcal ophthalmia	...	14
Purulent conjunctivitis	...	1
Simple conjunctivitis	...	6

Age at onset was as follows :-

- 12 hours	...	...	8
- 4 days	...	...	4
- 8 days	...	...	3
+ 8 days	...	...	6

Attendance at birth was as follows :—

General Practitioners	...	5
Institutional	...	16
District Nurses	...	—
Midwives	...	—

Bacteriological examination was carried out in 20 cases with the following results :—

Gonococci	...	14
Staph albus	...	3
No organism found	...	3

In eight cases it was not stated whether a swab was taken before notification and in one case no swab was taken.

Nine cases were admitted to Belvidere and seven to Ruchill.

Both the number of notifications and the number of gonococcal infections showed an increase of five on last year's figures.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year there were 111 cases of puerperal fever and 111 cases of puerperal pyrexia compared with 138 and 65 respectively for the preceding year. All the puerperal fever cases and all but two of the puerperal pyrexia cases were removed to hospital or other institution.

There were no deaths among these cases.

WELFARE FOODS, 1966.

DETAILED ACCOUNT OF THE YEAR'S WORKING.

The Distribution of Welfare Foods was taken over from the Ministry of Food on 28th June, 1954.

Under the Ministry of Food there were 25 distribution centres in Glasgow. There are now 34 centres. The additional centres are necessary to cover the outlying housing schemes.

The documents of entitlement to Welfare Foods are issued to beneficiaries by the Ministry of Social Security on application.

The welfare price of National Dried Milk was increased from 10½d. to 2s. 4d. per tin in 1957, and since then there has been a continuing drop in demand. The increase in price is not the only reason for the decline in issues, other contributing factors being (1) babies now being given solid foods at a much earlier age and (2) parents buying the more attractively packed proprietary baby food.

National Dried Milk may be purchased at a price of 4s. per tin if no valid token is available. The average weekly issues of such milk in 1966 was 262 as compared with 330 in 1965 and 206 in 1964.

From 1st June, 1961 the following price increases for vitamin products came into effect :—

Orange Juice	...	1s. 6d. per bottle. Previously 5d.
Code Liver Oil	...	1s. per bottle. Previously free.
Vitamin Tablets	...	6d. per packet. Previously free.

Tokens are no longer required for vitamin products (other than free issues) and no proof of identity is required of beneficiaries. This last increase brought about a further very considerable reduction in the demand for vitamin products throughout the country and the decrease in Glasgow was on a par with the rest of Britain.

VITAMIN PRODUCTS.

PERCENTAGE UPTAKE OF POTENTIAL.

	1966	1965	1964	1963	1962	1961	1960
Orange Juice ...	6.4%	6.2%	5.8%	4.9%	3.6%	9.5%	25.5%
Cod Liver Oil ...	3.7%	4.3%	4.9%	3.9%	3.2%	5.7%	8.1%
A and D Tablets	9.7%	9.2%	9.4%	7.9%	5.9%	11.6%	17.9%

No reasonably accurate figure of uptake of Potential can be given in regard to National Dried Milk, because milk tokens can be used for either liquid or dried milk.

SECTION IV

SCHOOL HEALTH SERVICE.

GENERAL INTRODUCTION.

Health teaching has rapidly expanded during the session and now sixteen part-time doctors give talks in ten primary, thirty secondary, six special and two approved schools and three colleges of further education. Health visitors give talks in sixteen other primary and eighteen secondary schools. In addition, the school medical officer/health visitor teams give health instruction at the various colleges of further education in the course of their periodic visits of medical supervision.

During the early part of the year, a *poliomyelitis "spotter" scheme* was set up in nursery schools and day nurseries as a result of which two early cases of poliomyelitis carrier state were discovered. However, a massive poliomyelitis vaccination drive by the Department, well supported by the public, ensured freedom from this disease during the year.

Drug addiction amongst adolescents has become a problem in large cities in England, but as yet the City of Glasgow appears to be relatively free. The possibility of examination of urine specimens from delinquents for possible content of Amphetamine and other drugs is now under consideration.

The consultant surgeon to the Service remarks, in his section of this Report, on the increasing number of children with *spina bifida* now being treated at school clinics. These, representing as they do a relatively small proportion of the total number in Glasgow, indicate the problem that the education authorities will be facing in the future. Many of these children are intelligent and, with adequate therapy, can be taught to walk using calipers and crutches. It is, however, expected that every year from now on approximately forty cases of spina bifida with paraplegia will be accepted into the educational system. A special centre for these children will be needed with augmented nursing and physiotherapy services. The design of future comprehensive schools should make allowance for the provision of adequate lifts. It should

be borne in mind that whereas, in the past, most of these children either died early in life or were severely mentally handicapped, nowadays with the advance of paediatric surgery this is no longer so.

The *problem of cleanliness* of school children has given some concern during the year. In the case of boys, nits were found in 4.1 per cent. of entrants and 4.2 per cent. of 13-year-olds. The position, as regards girls, is that 10.4 per cent. have nits on school entry at 5 years of age and 12 per cent. at the 13-year-old examination. These figures make depressing reading when one considers the constant attention which has been given to this matter over the years. It is hoped that the health education programme will help in the eradication of this problem.

The *neurological services* are now well established and are proving of great value to the school medical officer and the child guidance psychologist. The E.E.G. machine is in regular use. The neurologist is at present investigating cases of dyslexia in co-operation with the principal psychologist.

The chief dental officer reports an upward trend in advanced *dentistry*. He states that during 1966 twenty-six crowns, thirty-four inlays and sixty-three root treatments were carried out. The large increase in root treatments for the year is a result of the refresher course for dental officers held in May, 1966.

The *diphtheria/tetanus and poliomyelitis campaigns* were once again successful. This year the campaigns were held concurrently which proved to be of value in staff deployment. This type of arrangement had been previously banned by the Central Authority, but in 1966 the Advisory Committee to the Government decided to allow concurrent campaigns as the incidence of poliomyelitis is nowadays very small.

Courses were attended by staff released from duty for the purpose. One medical officer attended a course on audiology and deafness at Manchester during a week in March. Another attended a refresher course on paediatrics in London during a period of just under six weeks in the Summer. Three others attended a course during three weeks in October at Glasgow University dealing with the ascertainment of mental deficiency. A Seminar in London to discuss prevention of mental ill-health by public health programmes was attended by a medical officer and a health visitor during a week in July.

Lectures by medical staff continued to be given to pupils training for the S.R.N., the District Nurse's qualification, and also to students of the School Meals Service. The Principal Medical Officer attended the Conference of the National Association for Maternal and Child Welfare in London on 30th June and gave an address entitled "The Glasgow Scheme of Health Talks in Schools and Colleges."

Projects involving co-operation of the staff included the following. In connection with the controlled testing of Gamma Globulin contacts, doctors reported to the Medical Officer of Health respecting infectious hepatitis. Medical staff co-operated with Strathclyde University in a Social Survey. Medical and nursing staffs were again asked to co-operate in the National Survey of Health and Development in which from 1946 there has been a follow up of 5,000 babies through adult life.

Survey of Housing Conditions. The usual five-yearly survey of housing information (relating to children in specified age-groups) obtained at routine medical inspection in schools by medical officers appears in this Report.

Published articles by members of the staff during 1966 were as follows :

"The Keystone School Vision Screening Test. A Review of Visual Abnormalities found following a Survey of four Schools in Glasgow." T. S. Wilson and M. P. Menzies. *The Medical Officer*, Vol. 115, No. 4, pp. 46/7.

"Guthrie Test for Phenylketonuria (P.K.U.). A Survey of Special Schools and Occupational Centres in Glasgow." T. S. Wilson, M. P. Menzies and J. Scott. *The Medical Officer*, Vol. 115, No. 13, pp. 171-174.

"Scottish Local Health Authorities—Medical Staffing as at January, 1966." T. S. Wilson. *Health Bulletin* 24, 3 pp. 81-84.

"Portrait of a School Doctor." T. S. Wilson. *Family Doctor*, February, 1966.

"Sudden Bilateral Deafness and Mumps in Childhood." Margaret Dunn. *The Medical Officer*, Vol. 115, No. 15, pp. 198/9.

GENERAL STATISTICS

Number of Schools at 31st December, 1966.

(a) Primary	207
(b) Secondary	73
(c) Schools for Handicapped Children	24
(d) Occupational Centres	11
(e) Approved Schools	2
(f) Residential Schools	13
(g) Nursery Schools	49
(h) Hospital Schools	9
(i) Agricultural Schools	1
(j) Gardening Schools	1
Total Schools Under Education Authority	390
(k) Schools in receipt of Grant and under Medical Inspection	10
	<u>400</u>

The average number of children on the register of all schools was 173,505 and the average number in attendance during the year was 154,008 (88·8 per cent.).

SYSTEM AND EXTENT OF MEDICAL INSPECTION AND TREATMENT.

INSPECTION.

Routine medical inspection in ordinary schools was given to (1) children in the Infant Department who had not previously been inspected systematically; (2) 13-year-olds; (3) 16-year-olds; (4) 9-year-olds (testing of vision only by doctor/health visitor team) and (5) 6-year-olds (testing of hearing by audiometricians). Vision testing of all age-groups by means of the Keystone Vision Screener was undertaken by nurses in selected schools. Routine medical inspection was also given in schools and classes for handicapped children.

Other arrangements were broadly similar to those which operated last year.

TREATMENT.

A list of the school clinics and services given are as follows :—

CLINIC	Skin, Eye, Ear and other minor diseases	Refraction	Dental	Special Skin	Ultra-violet ray	Orthopaedic	Scabies Baths
80/90 Kinfauns Drive, W.5	1	1	2	—	—	1	—
18 Plean Street, W.4	1	—	1	—	—	—	—
4 Sandy Road, W.1	1	1	1	—	—	—	—
130 William Street, C.3	1	—	1	1	—	—	—
91 Denmark Street, N.2	1	1	2	—	—	—	—
Hyde Park School, N.1	1	1	1	—	—	—	—
15 Glenbarr Street, N.1	1	1	4	—	1	1	1
60 Avenuepark Street, N.W.	1	1	1	—	—	1	—
40 Grovepark Street, N.W.	1	1	1	—	—	—	—
2 Lochdochart Road, E.4	1	—	—	—	—	—	—
5 Craiglockhart Street, E.3	1	—	—	—	—	—	—
74 Wellhouse Crescent, E.3	1	1	—	—	—	—	—
155 Crail Street, E.1	1	1	2	—	—	—	—
23 Acorn Street, S.E.	1	1	—	—	—	—	—
10 Redan Street, S.E.	—	—	1	—	—	—	—
22 Arnprior Quadrant, S.5	1	1	—	—	—	—	—
Ashtree Road S.3	1	1	—	—	—	1	—
Calder Street School, S.2	—	—	1	—	—	—	—
26 Florence Street, C.5	1	1	2	—	1	1	1
Netherplace Road, S.W.3	1	1	1	—	—	—	—
74 Berryknowes Road, S.W.2	1	—	—	—	—	—	—
Fairfield School, S.W.1	—	—	1	—	—	—	—
St. Anthony's School, S.W.1	1	—	—	—	—	—	—
29 Govan Road, S.W.1	1	1	1	—	—	—	—

A new clinic at Ashtree Road, Pollokshaws, was opened on 7.11.66, and the Harriet Street Clinic was discontinued from the same date.

Other treatment facilities provided were as before.

PARTIALLY-SIGHTED CHILDREN.

The most important event of the year has been the setting up of a working party by the Secretary of State to consider the problems associated with the education of partially-sighted children and to make recommendations.

Glasgow is well represented on this committee and we all look forward to hearing the suggestions for dealing with the main problems which these groups present.

Some of the main difficulties as far as partially-sighted children are concerned have been the small numbers involved, the need for parental guidance before the child reaches school age, and the extreme difficulty in placing these children in suitable employment when they leave school.

There is a real need for the adoption of a more uniform standard for certification of partially-sighted children throughout the country so that the problem can be more realistically assessed. It would appear that one of the most hopeful suggestions when dealing with this problem is the formation of larger groups of those children than most local authorities can collect. The standard of vision at present employed in Glasgow for certification is as follows :—

6/6 6/9 6/12 6/18	Educated as normally sighted.
6/24	Marginal group. Some will benefit from a normal education and some not.
6/36 6/60	Partially sighted for education.
5/60 4/60 3/60	Blind for the purpose of education but not on Blind Register.
Less than 3/60	On Blind Register.

Visual Acuity considered is the best binocular vision with correction and assuming a full visual field.

This is not the only or necessarily the best system, but by its use all medical officers can make a preliminary assessment of a child's visual grading. Once the ophthalmologist has confirmed what is the best visual acuity a more positive grading can be made.

In all cases, but especially those in the border-line groups such as 6/18 and less than 6/60, other factors must be taken into consideration such as intelligence quotient, home conditions, school attendance record and, most important of all, evidence of the child's progress at school. It will thus be evident that while the assessment is primarily a visual one, it is not solely a medical problem but that the psychologist, health visitor and school teacher are all actively involved. By building a strong case for the transfer of any child based on factual information rather than clinical or general impression the problems associated with certification such as parents obtaining conflicting advice should be minimised.

The Department is indebted to Dr. William Wilson, Consultant Ophthalmologist, for the above notes and for his advice and assistance during the year.

KEYSTONE SCHOOL VISION SCREENER.

Three of these machines are now being used in selected schools to test the vision of the children (all ages) who are in attendance. For the year to 31st December, 1966, the numbers dealt with and the results were as shown :—

	Boys	Girls	Totals
Number tested	5,945	5,388	11,333
Number passed test	5,107	4,532	9,639
Number referred for refraction ...	735	808	1,543
Number with colour vision abnormality	103	48	151

NEUROLOGY.

To Dr. Ivan T. Draper, Consultant Neurologist, we are indebted amongst other things for the following note :—

The Neurological Service has continued to expand during the past year. Originally it was thought that one session a month would be sufficient, but this was an underestimate.

Routine clinics are now held every week at the Cowcaddens Clinic, Callander Street, where an 8-channel Mingograph E.E.G. Machine has been installed. Miss Lamont attended a training course for E.E.G. technicians at the Institute of Neurological Sciences, Killearn, and is now responsible for maintaining and operating the machine. Electroencephalography in young children presents considerable technical difficulties, and two or three hours may be required for a recording, which with an adult patient would occupy 20 or 30 minutes. Similarly, the interpretation of records has its own problems. Eventually, with more routine recordings on children with developmental disorders, it is hoped that this technique will provide not only a diagnostic but also a prognostic tool.

The increased time available at the clinics has made it possible to bring some children back for review and in this way it is hoped that more will be learnt about the development of handicapped children. Some conditions which have been described as distinct syndromes appear to be developmental arrests or diversions which later merge into other disabilities or into normality. Dyslexia probably falls into this category. Mild degrees of so called dyslexia may be part of the normal acquisition of reading and writing skills. Under the influence of a variety of pathological conditions an arrest in development at this stage gives rise to the clinical entity which is called " specific dyslexia."

Its response to treatment might be expected to depend upon matching the therapeutic technique with the under-lying pathology. A study of this problem will be part of the work to be undertaken in conjunction with Mr. Dell of the Child Guidance Service.

CHILD GUIDANCE SERVICE.

During the session ending June, 1966, the Child Guidance Service lost seven experienced clinicians, mostly to other posts; and since it takes years of experience to make new recruits fully effective, it will be appreciated that a phase of change is now under way.

To start with, the number of children seen at the clinics was 6,010, more than 5 per cent. less than last year and about the same as the year before that. Attendances totalled 36,977; school visits were 5,067 and homes were visited on 2,043 occasions. We should like to see a steady expansion of this last mentioned social service which is presently undertaken by 17 part-time health visitors seconded from School Health Service.

Most children are sent to us for behaviour disorders, learning difficulties and personality problems, in that order—and many of these also include developmental or environmental factors, amounting in some cases to very complicated and disturbed histories. Some idea of what this represents in terms of "symptoms" may be gathered from the following extracts:—enuresis and encopresis 680; psychosomatic illness 296; temper tantrums and unruliness 391; shyness, inhibitions and avoidance reactions 343; sleeping or feeding difficulties 266; aggression, violence and defiance of authority 524; theft 357; weepiness and dependence 214.

In addition to these group totals there is a further category of children examined as part of the ascertainment procedure for special educational treatment. Many of these cases require extensive interviewing, and during the year the new official form "MH2" came into use as a record of the examination and recommendations. While it adds to the burden of documentation, Form MH2 should serve to make more readily available the relevant information on which decisions about ascertainment need to be made. The psychological examination of physically handicapped children requires a special technique, and is particularly difficult in view of the pressing need for early ascertainment of such cases. This work is carried out by a very experienced member of the Service who also visits the Balvicar Centre and other appropriate centres outwith the administration of the Education Committee.

With slight variations, sources of referral totals show that the percentage against each main category remains steady : about 57 per cent. come from schools, 12 per cent. from School Health Service, 13½ per cent. from Special Schools Department, 6 per cent. direct from parents or relatives (a slight increase), 5 per cent. from Health and Welfare and the remaining 6 per cent. from a variety of sources (mainly public departments or hospitals).

Tutorial groups for maladjusted children who also require urgent attention for school failure are now established in 5 clinics, with the prospect of further extensions in the new session. Among such pupils are found certain "school refusals," a number of well-defined "school phobias," and other disturbed children whose daily attendance at clinic thus allows for the personal attention of the resident psychologist as and when required. The provision of our first day school for the maladjusted should be a reality in the coming session, and on a more specific level, a unit for "dyslexic" children is being organised at our Knightswood Clinic, and will be functioning as soon as a nucleus of appropriate cases can be formed.

Unhappily we have still to report slow progress in the re-establishment of our residential clinic at Nerston : while this situation remains, our city staff will continue to adapt day methods to accommodate many children whose adjustment would have been more efficiently met by residential placement. Indeed this gap at local level highlights the marked lack of facilities of this kind everywhere in Scotland for children of all school ages. In recent years, Glasgow has placed primary pupils in Dr. Barnardo's Craigerne School at Peebles, Harmeny House in Midlothian, and secondary pupils at Lendrick Muir School in Kinross. But since pupils go to these centres from all over Scotland, competition for places is very keen and the waiting time is often at least a year for recommended cases. Even when Nerston is opened, this City could profitably use another similar centre elsewhere and when possible, a further residential school for disturbed pupils beyond the 12-year-old level.

Since our last note there has been outlined in the Annual Report to the Director of Education what are today regarded as the functions of a comprehensive Child Guidance Service, such as Glasgow's has always aimed to be. These are summarised now :—individual casework (of which some of the figures above give the picture)—organisation of varied forms of educational treatment—consultation with other case-work agencies—advisory work in schools—advisory work in selection procedures — educational research — public relations — community

service—training—miscellaneous demands. “ Few of these functions are solely the concern of a Child Guidance Service . . . but a well balanced service should try to equip itself to meet as many of these demands as local conditions permit.”

The team work of many disciplines is gratefully acknowledged annually in this Report : in particular we must mention the valuable help of Dr. T. S. Wilson, Dr. Menzies and their colleagues ; Dr. Draper, Neurologist, Dr. Stone, Dr. Wardrop and their colleagues ; and all others who contribute weekly to the steady flow of investigation and treatment undertaken by this Department.

To Mr. J. Mackenzie, Depute Principal Educational Psychologist, who contributed this section of the Report and for much other assistance we are most grateful.

HANDICAPPED CHILDREN AND SPECIAL EDUCATIONAL TREATMENT.

Miss B. S. Watson, Adviser in Special Education.

The Education Committee makes a wide range of provision for handicapped children. The assessment of the needs of these children requires close co-operation between the Education Department, the Child Guidance Service and the School Medical Service. In certain cases also advice is sought of the various consultants and specialists allocated by the Western Regional Hospital Board.

Educational provision is made as follows :—

A. CHILDREN WITH VISUAL DEFECTS

1. *Blind.* 24 Protestant children attend the Royal Blind School, Edinburgh, as boarders. 12 Roman Catholic children attend St. Vincent's (Tollcross) School as day pupils or boarders. This school also has on roll 17 children from other parts of Scotland.
2. *Partially Sighted.* One day school provides for a total roll of 59 children.

B. CHILDREN WITH DEFECTS OF HEARING

1. *Deaf.* Two schools make day and boarding provision for children from Glasgow and other parts of Scotland. The total roll of 115 includes 48 Glasgow children.

2. *Partially Hearing*. One day school and one day/boarding school have a combined roll of 94 children of which 77 are from the Glasgow area.
3. A *Speech Reading Unit* gives the services of four peripatetic teachers of the deaf to approximately 100 children who, in spite of a hearing loss, can attend ordinary schools.
4. In addition, two teachers of the deaf are seconded to the Audiology Unit at the Maternity and Child Welfare Centre at Balvicar Street for the purpose of assessment of suspected deafness in very young babies.

C. PHYSICALLY HANDICAPPED CHILDREN

1. *General Disabilities*. 10 day schools provide for 240 children.
2. Children suffering from *cerebral palsy* and requiring intensive therapy attend a day school with a nursery section. Roll 45.
3. A nursery class is available for children suffering from deformities probably caused by *thalidomide*. Only four children are left in the group.
4. A scheme of Home Tuition is available for children unable to attend school. At present 30 children are taught at home by visiting tutors.

D. MENTALLY HANDICAPPED CHILDREN

1. *Educable*. 19 day schools. Total roll 2,916. One residential school providing 45 short term places.
2. *Trainable*. 11 occupational centres. Roll 434.

E. OTHER PROVISION IN GLASGOW

1. Non-communicative children are taken from the age of 3 years in a small group in one of our schools for the physically handicapped. There are 16 on roll.
2. *Hospital Schools* are established in hospitals where children are undergoing treatment. There is a total roll of 263. One of the units which was taken over by the Education Authority early this year deals with severely disturbed children requiring psychiatric treatment.

F. PROVISION MADE BY OTHER BODIES

1. Advantage is taken of this provision in the case of very small numbers of children who cannot fit into our own local provision. These children may require residential education because of multiple handicap, inadequate homes, the need for close medical care, etc. Total number 120.
2. Mentally handicapped children who present serious behaviour problems at home and in school may be sent to hospital for long term care. There are generally about 70 such children placed in six suitable hospitals.

Further Education, Youth Employment Services and After Care are available for school leavers from the age of 16 years.

The Education Department is indebted to the Principal Medical Officer for Schools and his assistants for the full measure of co-operation they give in all matters relating to special educational treatment. Their advice and assistance are invaluable when the assessment and placement of handicapped children are under consideration

ASCERTAINMENT OF MENTAL HANDICAP.

During the year 838 children (430 boys and 408 girls) were examined for the first time as regards classification of mental handicap and there were 1,786 re-examinations (982 boys and 804 girls).

Other details are :—

- (1) Number ascertained and transferred to special schools or classes, 158 boys and 122 girls—total 280.
- (2) Number ascertained and transferred to junior occupation centres, 20 boys and 22 girls—total 42.
- (3) Number for whom no facilities are available—nil.
- (4) Waiting list for admission to special schools as at 31st December 1967, 46 boys and 42 girls—total 88.
- (5) Number of pupils referred to Health and Welfare Department during the year as section 65 cases, 19 boys and 15 girls—total 34.
- (6) Number of pupils admitted to hospital for care during the year, 9 boys and 11 girls—total 20.

REPORT ON HEALTH EDUCATION.

Dr. M. P. Menzies, Assistant Principal Medical Officer.

Since the Pilot Scheme in 1960, designed to educate young people the better to withstand the stresses of adult life, health education programmes are now a well established section of school health work.

This year, teaching and group discussion within the curriculum has been arranged for 31 primary schools, 48 secondary schools, 8 schools for the handicapped, 2 approved schools and 11 further education colleges. To make this possible all aspects of the work of the Service have been carefully studied and any part deemed wasteful of time according to present-day standards has been terminated in order to make both medical and health visitor staff available. We have also benefited from the employment of 21 doctors on a sessional basis. For the most part these are married women, who bring a wealth of practical experience.

The Further Education Colleges experience health discussion as part of the Student Health Service we organise but, in addition, courses have been provided where certain aspects have been specially indicated.

Several groups of 5-7 year old children were given short illustrated talks on basic health by one of the doctors and both the interest of the children and the reports from the teachers made this an interesting experiment. The need for help to the more vulnerable groups is shown in the increase in number of schools for the handicapped now taking part. While much of this work is repetitious and basic in content the doctors who carry it out evince satisfaction in the efforts these young people make. The skill and temperament of the health educator is of importance throughout but both have to be of a very special quality to stimulate and maintain interest.

The project of putting ten lessons for the 5-6 year olds on to video tape for beaming to infant schools has continued throughout the year at the Education Television Studios; the health visitor selected to carry out the programme has herself been working on "the staging." We have had assistance from Infants Mistresses where classrooms and pupils have been made available. It was hoped to have these lessons on the air this year but studio space is in great demand.

One of the greatest difficulties encountered was obtaining up-to-date visual aid material in sufficient quantity to keep our increasing

staff supplied. Considerable co-ordination is required to ensure that the rotation and storage of books, films and all other visual aids operates reasonably smoothly. Responsibility for this as well as for ensuring that requests are met from schools and other agencies has fallen on the shoulders of the Superintendent of School Health Visitors and she has made the success of the scheme one of her own special interests.

Now that various groups are considering the recommendations of the Cohen Report on Health Education, criticism is sometimes made of a scheme such as ours being carried out by medical officers and health visitors and there is a good deal of discussion at various levels as to who in fact should be doing this kind of teaching. In the six years of experience gained in group teaching, all staff are agreed that the content of much of the questioning and many of the areas of ignorance are such that a medical background has a very marked place in meeting many situations.

We are particularly fortunate in having the interest and support of the Director of Education and teaching staffs and in many of the schools teachers have become part of the team.

An extension of the methods to help young people in the ordering of their lives began last year when at the request of the Director of Education and with the help of the Senior Administrative Medical Officer of the Western Regional Hospital Board and with the goodwill of the Matrons, a scheme which has been called the "Service in Hospital Scheme" was commenced. Young people between 14-15 years of age, usually those due to leave school at 15 years of age, are given the opportunity of "day release" to a hospital, for one day a week for a period of four weeks. The scheme is designed to teach these young people facets of health, of ill-health and of the many aspects of life seen best of all in a hospital and, through this, of the ways one can give service in the community. The opportunity to take part in the scheme has been enthusiastically taken up by the girls and to a much less degree by the boys. At first it was not seen in some hospitals what part a boy could play; however, with wider understanding of the aims of the scheme some of the matrons and medical superintendents have outlined areas where the boys too can play a part. It came as a gratifying surprise that in this first year of the scheme girls were so enthusiastic as to give up school holidays if matron would permit them on these days to return to their allotted hospital. We try to prepare the young people for this experience and to make use of it in the Health Education Scheme.

MEDICAL SUPERVISION IN COLLEGES OF FURTHER EDUCATION.

Dr. Elizabeth Primrose, School Medical Officer, reports on her work at Barmulloch and Stow College of Engineering.

During the session fortnightly visits were paid by the School Medical Officer and Health Visitor to Barmulloch Further Education College and to the Stow College of Engineering. The purpose of these visits was to carry out routine medical examinations on students taking a full-time course, and, where the curriculum permitted, to give health talks. The pattern of such meetings was varied to meet the needs of each group.

At Stow College groups of fifteen to twenty students were medically examined and afterwards a talk was given or a film shown. This was usually followed by questions and discussion. As most students had received health talks at school, topics of current importance for this age group (16-18 years), namely smoking and venereal disease were dealt with. It was shown that widespread ignorance exists concerning the latter. Special arrangements were made to talk to day-release female students on the physiology of sex and motherhood, with emphasis on the prevention of disease.

At Barmulloch Further Education College male and female students were routinely examined and health talks given to each group of fifteen to twenty students. The girls received talks on personal hygiene, the physiology of menstruation, and discussions followed. By means of a questionnaire, information was obtained regarding the girls' interests and social background. Groups of male students were shown films on smoking and venereal disease. The film, "A Quarter Million Teenagers," was particularly successful and encouraged useful discussion.

It was interesting to observe the appreciation of the students when they were given facts to replace "old wives' tales." There is great scope in this field of health education.

SPECIAL CARDIAC CASES.

Dr. Rogen, Consultant Physician in Cardiology, comments :—

School cardiac clinics continue to function smoothly. It is worth remarking that there is a change in the type of case seen ; fewer cases of rheumatic heart disease and more of congenital heart disease are being picked up.

I reported in the *Glasgow Medical Journal* in November, 1952 the findings of the four years from 1947 to 1951 ; of 917 children examined, 340 were thought to have rheumatic heart disease and 91 to have various forms of congenital heart disease. A further four years' review was undertaken recently and covered the years 1960 to 1963 inclusive. In this time 783 children were examined. Rheumatic heart disease was diagnosed in 59 only and congenital heart disease in 214. This is a most impressive drop in the incidence of rheumatic heart disease. Such a reversed ratio in the incidence of congenital and rheumatic heart disease in those two periods is probably due, in part, to increased specialist skills in the diagnosis of cases of congenital heart disease and in part to improvements in therapy ; for example, the handling of cardiac failure, surgical treatment and chemotherapy of intermittent infection, leading to increased survival rate of cases of congenital heart disease. On the other hand, the lower incidence of rheumatic heart disease must be related to the steady fall in the incidence of rheumatic fever.

ORTHOPAEDIC AND POSTURAL DEFECTS.

Mr. Guest, Orthopaedic Consultant, supplied the following note regarding the work for the year.

The work at Mearns Kirk Hospital has kept at a steady rate throughout the year. It will be noticed from the figures that there has been another large drop in the number of admissions due to the late effects of poliomyelitis, showing how those affected in the outbreaks that occurred in Glasgow in the late 1940's and early 1950's are now entering employment, and leaving the supervision of the School Health Service. Any necessary further supervision of these patients is carried out through the Out-Patient Department of Mearns Kirk Hospital. The School Health Service has proved a valuable medium for the care of these patients, limiting disability and providing early treatment of deformities in the years when these are most likely to occur.

More operations on children suffering from cerebral palsy is another feature of this year's report, indicating the wider use of operations to improve those children who have been under treatment at Kelbourne Spastic School. It is emphasised that operative treatment is only an incident in the course of their therapy and the treatment of cerebral palsy still lies mainly in the hands of therapists and teachers. The work at the spastic school and the screening and selection of pupils and their subsequent assessment and disposal has been continued by the Panel of Consultants.

The increasing number of children with spina bifida now being treated at the school clinics, representing, as they do, a relatively small proportion of the total number in Glasgow, indicates the problem that the Education Authorities will be facing in the future. Many of these children are intelligent and with adequate therapy can be taught to walk using calipers and crutches. It seems likely that since there will be something like forty new cases a year occurring in Glasgow, given a better prognosis by the modern operative techniques of the paediatric surgeons and rehabilitated by modern therapeutic methods, a special centre for these children will be needed with a higher proportion of nursing staff than is normal at a special school, and with a therapist attached to it.

There were 118 children admitted to Mearns Kirk Hospital on one or more occasions during the year. Of these, 15 were admitted for investigation or physiotherapy. 106 operations were carried out as detailed below.

Diagnosis of the 118 cases was as follows :—

Foot deformities, 67 (congenital 11, acquired 22, post poliomyelitis 16, spastic 18). Other conditions due to poliomyelitis, 10 ; torticollis, 3 ; muscular dystrophy, 5 ; cerebral palsy, 18 ; knock-knees, 2 ; osteomyelitis, 1 ; rickets, 3 ; spina bifida, 3 ; thalidomide, 1 ; miscellaneous, 5.

Operative treatment was given as undernoted :—

Manipulations (including tenotomy of the plantar fascia), 28 ; elongation of tendo achilles, 15 ; tenotomy for torticollis, 3 ; tendon transplant, 4 ; stabilisation of foot, 10 ; correction of toe deformities, 12 ; operation for cerebral palsy—adductor tenotomy, 9 ; transplant at knee (Egger's operation), 8 ; arthrodesis of wrist, 2 ; osteotomy for knock-knee, 1 ; stapling for shortening, 10 ; arthrodesis of shoulder, 1 ; miscellaneous, 3 ; total operations, 106.

The average stay in hospital was 34 days.

The number on the waiting list at 1.1.67 was 16.

AUDIOMETRIC SURVEY UNIT.

Dr. Margaret Dunn, School Medical Officer.

The work of the Audiometric Survey Unit expands each year and, as more problems emerge from the ever-widening knowledge of hearing defects, more children come into the ambit of those requiring help.

One necessity in any scheme such as this is to have fully trained staff, and for the staff to be kept abreast of up-to-date developments as regards research and equipment. We are fortunate in these respects and have four school medical officers who have special training in this work, two being attached to the deaf schools as part of their routine duties. The audiometricians have been participating in special courses at the Ear, Nose and Throat Hospital. They have been familiarising themselves with a "Pop-up Toy" audiometer made in the Regional Physics Laboratory under the direction of Miss Knox, the Physicist, and we are indebted to her and her department for their interest and co-operation.

The work of the Otologist continues to expand and many of the cases referred for his opinion are most interesting and also present considerable diagnostic difficulties. The concept of the school medical officer, the health visitor and the otologist working as a team and being present together, is of great benefit and allows for consolidation of counsellings and dissemination of the results to all sources with the minimum of delay.

The cases referred from the routine surveys, i.e. from the children seen because of age and who have failed the sweep test in school, continue to offer interest, as there are children with high tone losses undetected by teacher or parent. It is interesting to note how some children overcome a hearing loss that others cannot and, in this connection, it is again evident this year that there are children being forwarded for consideration for special schools because of educational retardation who indeed have hearing losses. There is a group of particular note in which there have been neonatal difficulties such as (a) the premature or damaged child with anoxia; (b) where the mother is Rh-ve with antibodies and the child requires transfusion at birth—these children in quite a few instances show up after a year or so at school as slow learners with behaviour difficulties and a hearing loss. It would appear that this first group is increasing in number. I feel that when a child presents as a behaviour and learning problem even without a definite neonatal abnormal pattern, hearing investigation should be performed and there should be a class in the deaf schools for those who are both deaf and mentally handicapped.

There is a new group of children appearing in the clinic and the numbers of these are increasing, i.e. those children with retarded speech development. Much emphasis has been put on the identification of "children who do not talk" as regards early assessment and perhaps this is why there is a rising number. Another factor may be that our

unit is now geared to the testing of such children and so they are referred in greater numbers. As a School Health Service we can accept any child from the age of two who asks for help and at the Balvicar Centre, where the otologist, school medical officer and health visitor team go monthly, referrals are seen below that age.

Some cases are referred from other sources as not deaf, but not speaking. The Kelbourne Aphasia Nursery has proved its worth in accepting a small group of these children on the basis that they are not mentally handicapped and not autistic. The value of this class is immense as regards socialising the children. They gain immeasurably from contact with their coevals and the parents gain assurance from the obvious progress of the child. The infant group is indeed a long term assessment class where the child can be studied by expert teachers and speech therapists and progress details regularly noted and evaluated.

They continue to be reviewed by the otologist and to have audiometry carried out. In some a hearing loss can be demonstrated after a long period of investigation, and this, allied with the language and learning difficulties, can offer a problem of placement.

The Consultant Child Neurologist has given his advice on several children with speech problems and the results of his investigations are very helpful, both as regards diagnosis and placing the child.

The field of deafness in preventive medicine is large and there is no end to its practical application.

NURSERY SCHOOLS.

The usual small outbreaks of childhood infections have been experienced throughout the year, often initiated by the child who arrives in the nursery school with the label of "Adenitis" which is, of course, Mumps, or "Urticaria" which is Chickenpox. This is a constant source of annoyance to teachers-in-charge who are preventive-medicine minded.

Infection may mean that the school will lose its place on the rota for Southannan Residential School at Fairlie, and this is a great disappointment to those children due to go for the holiday.

The attempt by the Education Department to spread nursery school education to a wider group of children by having children in for half a day only has been further increased.

It was thought that Poliomyelitis might return to Glasgow last year and at the request of the Virology Department, Ruchill Hospital, nursery schools took part in a "spotter" exercise. This continued from early in the year until summer and by this means two early cases of the poliomyelitis carrier state were discovered in different geographical areas.

The special nursery school classes for the deaf, partially deaf, spastic and aphasic continued and the thalidomide group lost two of its pupils to ordinary school; both children have settled down and are doing well. The aim of this school has been to assist the children towards enrolment at ordinary school, but in some cases where no prosthesis is supplied, it is proving impossible to give the child skill in desk work or in independent manipulation of clothing for toilet purposes. These two basic needs may demand special education where there is the help of a nurse until the difficulty can be overcome.

During the year ended 31st December, 1966, children in the nursery schools to the number of 1,784 (902 boys and 882 girls) were subjected to "routine" inspection. The results are detailed below.

ROUTINE INSPECTION—NURSERY SCHOOL CHILDREN.

NUMBERS AND PERCENTAGES OF CHILDREN SUFFERING FROM DEFECTS

Nature of defects found					Boys	Girls	Totals
Uncleanliness of head (nits)	...	...	...	...	2	14	16 (0.9%)
Skin conditions of head or body	...	...	...	...	31	24	55 (3.1%)
Defective nutrition	...	...	...	...	7	8	15 (0.8%)
Mouth and teeth unhealthy	...	...	...	...	3	—	3 (0.2%)
Naso-pharyngeal conditions	...	...	...	...	130	98	228 (12.8%)
Eye diseases (including strabismus)	...	...	...	...	26	25	51 (2.9%)
Defective vision (for refraction)	...	...	...	...	2	4	6 (0.3%)
Ear disease (including defective hearing)	...	...	...	...	5	4	9 (0.5%)
Defective speech	...	...	...	...	24	6	30 (1.7%)
Mental and nervous conditions	...	...	...	...	7	6	13 (0.7%)
Defects of circulatory system	...	...	...	...	27	17	44 (2.5%)
Pulmonary conditions	...	...	...	...	28	32	60 (3.4%)
Deformities	...	...	...	...	78	37	115 (6.4%)
Other diseases or defects	...	...	...	...	27	23	50 (2.8%)

CLASSIFICATION OF NURSERY SCHOOL CHILDREN ACCORDING TO
REMEDIABILITY OF MAJOR DEFECTS FOUND IN THE INDIVIDUAL CHILD

Classification	Boys	Girls	Totals
Free from defects	577	626	1,203 (67·4%)
Defects of vision or oral sepsis	5	8	13 (0·7%)
Temporary ailments	154	141	295 (16·5%)
" Curable " defects	96	70	166 (9·3%)
" Improvable " defects	69	36	105 (5·9%)
Defects " not improvable "	1	1	2 (0·1%)
Totals	902	882	1,784 (100·0%)

ADDITIONAL INFORMATION—NURSERY SCHOOL CHILDREN.

Parents were notified of defects found in 406 instances, 115 (6·4 per cent.) of these being due to clothing, cleanliness or minor dental defects, 291 (16·3 per cent.) being in respect of other defects. School medical officers also noted 127 cases (7·1 per cent.) for reinspection as a result of defects observed in clothing or cleanliness or for minor dental defects, and 366 children (20·5 per cent.) having other defects. " Sound teeth " was recorded in 1,339 cases (75·1 per cent.), 1,456 pupils (81·6 per cent.) were recorded as having had complete diphtheria immunisation and 1,050 (58·9 per cent.) as having been successfully vaccinated or revaccinated against smallpox.

THE PLACE OF THE SCHOOL DOCTOR IN A LARGE
COMPREHENSIVE SCHOOL IN GLASGOW.

The pattern of work has changed over the years and Dr. A. J. Peters has commented on this. Some of his thoughts are given below.

The revolutionary changes which are taking place in the comprehensive school today also involve changes in the form of new demands from medical services in their broadest sense.

The school doctor can be the initiator of a vital link between all departments of teaching staff, parents, medico-social workers, attendance officers, hospitals, general practitioners, psychologists, dentists and clinics, to mention just a few.

The pupil presents as the initial focal point from which the school doctor must activate a chain of events rapidly and correctly in a specific direction, thus producing an efficient end result which is of lasting therapeutic benefit to the pupil concerned.

A complete change of clinical field has appeared in modern schools since the physical, mental and social improvement of the present school child. This has created the need for reorientation of thinking and diagnosis in quite different spheres from those found in the past.

Entirely new and superimposed demands have entered as a challenge in the field of preventive medicine, in which the role of the school doctor plays an important part. He must be prepared to recognise them and accordingly deal with them competently if he is going to remain in the privileged position of medical adviser in a school.

The wide programme of vaccination and inoculations done yearly, together with the basic routine screening, diagnosing and treatment of childhood complaints must however never be neglected or forgotten, if only for their future statistical value, as they are always present and form a major portion of his work.

In Glasgow, like all great industrial cities, preventive medicine is called forth to attack a multitude of new "syndromes" which have been added to the old lists. Obesity, neurosis, delinquency, immorality, accidents, developmental problems, behaviour patterns, sex, drugs, all enter in varying degrees into the vast and somewhat bewildering complexity of problems arriving at the door of the doctor, whose time in a large comprehensive school is never long enough.

Health education is of vital importance and can, in many instances, have considerable impact on the individual pupil but its value is much harder to assess when delivered to large groups. However, the crucial factor in evaluating the degree of retention by the individual is the inter-personal relationships in which the school doctor can participate enthusiastically. This is essential in what, to the mind of the school child, is a somewhat abstract field of preventive medicine.

The image of the school doctor must be correct if his responsibilities in a large comprehensive school are to be of functional value.

THE PLACE AND FUNCTION OF A SCHOOL MEDICAL OFFICER IN A JUNIOR SECONDARY SCHOOL IN GLASGOW.

Dr. Stella M. B. Perry comments as follows :—

Physical handicaps have been greatly reduced and no longer present the major problem, but other problems are emerging and they are more difficult to prevent. The aim of the School Health Service remains the prevention of physical, mental or emotional ill-health.

The School Medical Officer has several roles in a junior secondary school ; he is observer, health instructor and adviser as well as carrying out the statutory medical inspections of 13-year-old children.

The medical officer visits the school throughout the school year, the frequency of the visits depending on the size of the school. At the 13-year-old examination he will note any defect which is likely to affect the child's future ability to earn his living and, as the leaving date approaches, children who are due to leave school are seen for reassessment and given advice which includes the necessity for adequate sleep, food and clothing. On his visits the school medical officer will see any child put forward by parent or teacher who may have noticed some change in the child's appearance, work or behaviour.

As noted before, emotional and mental ill-health seem to be more common today and they are often preceded by "behaviour problems." The reasons for these are many, but one of the most frequent seems to be the environment of the "broken home."

Through visits to the school, talks with staff and parents, observation of children in their school environment, the School Medical Officer has a unique opportunity for studying the growth, in all its aspects, of the child and so come to better understanding and help to prevent the development of all defects.

He has ample opportunity for spreading health education, both in groups and to the individual. He revises the lessons of personal hygiene given in the primary school and goes on to more advanced subjects such as "Care of the Feet," "Prevention of Home Accidents," "Nutrition," "Food Hygiene," "Smoking" and "Alcohol." The children are encouraged to ask questions and take part in discussions.

It is through health education and the study of the child in its environment that we hope to improve the health of the individual, and the junior secondary school gives the School Medical Officer opportunity for this.

CLEANLINESS.

Dr. J. D. Leonard.

The problem of cleanliness among the school population is a constantly recurring one. The aspect of uncleanness most frequently noted is the presence of head nits. The table below shows the numbers of cases of nits found by school medical officers at the routine medical inspection of five-year-old entrants and thirteen-year-olds.

FINDINGS AT ROUTINE MEDICAL INSPECTION

	Boys				Girls			
	Entrants		13 year olds		Entrants		13 year olds	
	No. Examined	Nits Found	No. Examined	Nits Found	No. Examined	Nits Found	No. Examined	Nits Found
1957	9,059	368 (4.1%)	7,955	188 (2.4%)	8,576	1,023 (11.9%)	7,777	1,337 (17.2%)
1958	9,120	378 (4.1%)	7,616	187 (2.5%)	8,590	983 (11.4%)	7,545	1,082 (14.3%)
1959	9,036	381 (4.2%)	7,151	119 (1.7%)	8,628	894 (10.4%)	6,770	948 (14.0%)
1960	9,210	295 (3.2%)	8,272	134 (1.6%)	8,807	905 (10.3%)	8,311	1,061 (12.8%)
1961	9,176	236 (2.6%)	8,751	113 (1.3%)	8,789	764 (8.6%)	9,181	1,071 (11.7%)
1962	9,569	228 (2.4%)	8,091	141 (1.7%)	9,113	830 (9.1%)	7,957	948 (11.9%)
1963	9,846	273 (2.8%)	7,520	194 (2.6%)	9,194	872 (9.2%)	7,566	852 (11.3%)
1964	9,485	261 (2.8%)	7,511	233 (3.1%)	9,249	857 (9.3%)	7,433	947 (12.7%)
1965	9,156	285 (3.1%)	7,216	292 (4.0%)	8,772	800 (9.1%)	7,290	840 (11.5%)
1966	9,021	368 (4.1%)	7,281	304 (4.2%)	8,757	912 (10.4%)	7,425	892 (12.0%)

Examination of the boys' rates shows that between 1957 and 1961 there was a fall in the number of five-year-old boys with nits and this decrease continued into 1962. Since 1962 the rates for the thirteen-year-old boys, however, started to rise and this trend continued through to 1966.

The 5-year-old boys likewise showed a rise in rates from 1963-66. As the figures show, until 1964 infection rates among boys were 50-100 per cent. higher in the 5-year-old age group. Since 1964, however, this has changed and more 13-year-old boys are now infected. One wonders how much this actual and relative increase in uncleanness rates among the older boys is due to the recent tendency among them to wear their hair long.

Among the girls the fall in the rates of infection until 1961 is seen also, but while the 5-year-old girls demonstrate a rise in infection rates between 1961-66 similar to the boys, this is not so obvious with the 13-year-old girls. This latter group has rates of infection which are consistently 20-50 per cent. higher than those for 5-year-old entrant girls. The reason for this is difficult to see other than that infection spreads more readily among children at school.

Comparison of the figures for 13-year-old boys and girls reveals that the rates for the girls have fallen from sevenfold, that of the boys in 1957 to slightly less than threefold in 1966. This improvement is due less to any dramatic improvement in the girls than to a worsening of the boys' figures.

Comparison of the entrant boys and girls shows that the girls have rates of infection $2\frac{1}{2}$ - $3\frac{3}{4}$ times higher than the boys. The reason for this is almost certainly that the girls have longer hair.

It is obvious from the table shown that, in attempting to inculcate habits of cleanliness by health education, the main effort must be directed towards the girls and their parents. The fact that in 1966 more than 10 per cent. of 5-year-old girl entrants were found to have nitty heads at routine medical inspection is indicative that a proportion of parents are careless or ignorant of matters pertaining to health and hygiene.

This emphasis on the approach to the girls and their parents does not infer that the boys should be ignored. In view of the increased number of thirteen-year-old boys with nits the truism that long hair need not be infected hair should continue to be reiterated.

In conclusion, the fact that the problem of uncleanness is still present, is a disappointment to those who are engaged in health education, medical inspection and treatment of school children. It does point the moral, however, that it is not enough for preventive or curative measures to be available: there must be a willingness on the part of the individual or people affected to make use of these.

DEVELOPMENTAL PAEDIATRICS.

Dr. Margaret Dunn.

This is a discipline within the concept of paediatrics which can commend itself, both in its vital importance and in its content, to public health medical officers in the clinical field.

It is a study of the normal and abnormal aspects of a child from conception to maturity. It is a whole philosophy—a way of looking at a child and seeing the child as a whole. If the child is handicapped this view embraces his physical and mental state, his family, his life and his function in the world, and his future prospects. It involves the evaluation of handicaps, and routine examinations to detect errors in locomotion and posture, speech, hearing and vision, and appreciation of the balance of assets and deficits.

The great importance of this area of child health was stressed in the Course of Developmental Paediatrics held under the auspices of the Society of Medical Officers of Health in London in May-July, 1966. The medical officers selected for the course were already well established in the clinical field, and they were offered a vast amount of expert material by lectures, discussion, films, photographs, visits and demonstrations to further the conceptions of this specialty. The speakers included many leading exponents of the subjects under discussion, and offered much that was valuable and pertinent to the whole picture.

It is clearly obvious that skill in assessing the normal and handicapped child is of the utmost importance to the physical, mental and social well-being of the child, and with foresight, to the community. Careful trained attention paid to the young developing child will cause help to be instigated at the requisite moment. A handicapped child means a handicapped family and early detection is vital to helping this whole group to its best advantage.

The preventive services have a vital part to play in this work, their functions being :—

- (a) to identify those requiring help ;
- (b) to assess their disabilities ;
- (c) to co-ordinate the necessary helps ;
- (d) to offer parental guidance ;
- (e) to advise as regards placement ;
- (f) to further preventive techniques.

To this end the personnel must have a knowledge of the normal in order to detect the abnormal, and knowledge of the norms of development including the timing stages of such norms in order to offer assistance at the appropriate age. The prenatal and perinatal risk factors as regards child development should be well understood and, for example, the latest work on rubella kept in view as regards the post natal viability of the foetal virus. The factors involved in prematurity too are well worthy of note, for these children may be at risk for mental handicap, behaviour problems, and learning difficulties.

The full examination of the very young baby and continued detailed regular checks are the corner-stone of this type of work. This demands time, and therefore perhaps a reappraisal of present type of work weighting. Techniques involve examinations coming under the headings, inspection, posture, spontaneous movements, alertness, examination of muscle tone, elicitation of responses (mouthing, Moro reflex, etc.), eye reflexes, motor behaviour, vision and manipulation, speech and hearing, social behaviour and play.

It is obvious that a well-trained staff performing this work can offer the public a service of very vital importance and long-term consequence. It is a challenge to the public health medical officer in the clinical field to gain and use this expertise, stretch his abilities, and perform a work which will satisfy his own function in the preventive sphere, while at the same time the product of this expertise will be to the benefit of all children.

HEALTH VISITING AND NURSING SERVICE.

Miss J. S. Ferguson, Superintendent Health Visitor for Schools, reports on the year's work as follows :—

The number of health visitors (with Superintendent) at the end of the year was 49 and the number of nurses without Health Visitor's Certificate was 35.

Health visitors made 13,441 domiciliary visits—4,595 visits to schools for routine medical inspection ; 439 visits to nursery schools and occupational centres ; 9,278 attendances at clinics ; 221 attendances at child guidance clinics ; 818 attendances at schools for health teaching.

Nurses made 8,659 attendances at clinics ; 2,253 attendances at handicapped schools for general nursing duties ; 2,497 attendances at schools for cleanliness inspection ; 438 attendances at schools for Keystone vision testing.

Eighteen health visitors continued domiciliary visiting for the child guidance clinic in their own area to assess the family as a whole and to give supportive help. They attend case conferences at the child guidance clinics and make their contribution to the work of the clinic.

All *burns and scalds accidents* to school children are reported from the hospitals and visited by health visitors to give advice on home safety. It will be seen from the analysis on page 147 that the number of outdoor accidents has increased. This is mainly due to fires and fireworks in spite of all the exhortations given by the mass media on the care that should be taken in handling fireworks. A new hazard has arisen where abandoned cars are left ; the children play in them and throw lighted matches into the petrol tank. In a recent incident of this kind eight boys received burning injuries.

Children who are absent from school for long periods and receive *home tuition* are visited regularly and supportive help given on request.

Any children in schools giving concern to the teacher are visited on request.

National Child Development Survey. Twenty-eight young persons of twenty years of age, the number remaining from this survey of children born in 1946, were visited by health visitors. As these young people are now working or married, most of this visiting had to be done in the evening.

Health Education in schools has expanded and 18 health visitors take part in teaching in schools within the school curriculum. The schools to which they are attached are in their own area where they are known to school, clinic and home, thus maintaining a liaison between all three.

Extra Mural Activities. Classes for girls entering for the Duke of Edinburgh Awards are given in Child Care and Home Nursing. The number who participated this year was 340.

Requests from women's guilds, Girls' Brigade and other organisations for speakers and examiners are received and health visitors give willing help to these groups.

ACCIDENTS TO SCHOOL CHILDREN.

SURVEY OF BURNS AND SCALDING ACCIDENTS, 1st JANUARY—31st DECEMBER, 1966, AS CONDUCTED BY HEALTH VISITORS OF THE SCHOOL HEALTH SERVICE.

TABLE 1.
NUMBER OF ACCIDENTS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
<i>Burns—</i>								
Outdoor	...	...	...	...	60	13	49	2
Indoor	...	...	...	...	39	23	12	17
<i>Scalds—</i>								
Outdoor	...	...	...	...	1	3	1	2
Indoor	...	...	...	...	49	40	25	40

TABLE 2.
COMMON TYPE OF BURNING ACCIDENTS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Fireworks and bonfires	...	...	...	...	44	8	35	1
Fires (open or electric)	...	...	...	...	11	13	3	—
Sunburn	...	...	...	...	—	1	—	—
Clothing catching fire	...	...	...	...	6	3	1	5
Faulty plugs or appliances	...	...	...	...	5	—	3	3
Cookers	...	...	...	...	2	—	4	4
Electric iron	...	...	...	...	—	2	—	—
Railway electric cables	...	...	...	...	—	—	2	—
Abandoned cars (lighted match thrown into petrol tank)	...	...	...	...	6	—	2	—
Petrol tank of motor scooter in street exploded	...	...	...	...	5	3	1	2
Others (e.g. hot ashes, car petrol)	...	...	...	...	10	6	6	3

TABLE 3.
RESIDUAL DISABILITIES.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Burns	...	...	...	...	2	—	—	4

TABLE 4.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
Deaths	...	...	...	...	—	—	—	1

TABLE 5.

BY SOCIAL CLASS.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
<i>Burns—</i>								
No father	...	...	...	...	5	3	6	1
Professional	...	...	...	...	—	1	—	1
Clerical	...	...	...	...	—	—	4	1
Skilled	...	...	...	...	29	10	20	4
Semi-skilled	...	...	...	...	27	13	13	9
Labourer	...	...	...	...	28	9	18	3
<i>Scalds—</i>								
No father	...	...	...	...	2	4	4	3
Professional	...	...	...	...	1	1	—	1
Clerical	...	...	...	...	3	2	1	3
Skilled	...	...	...	...	16	16	4	18
Semi-skilled	...	...	...	...	13	9	11	6
Labourer	...	...	...	...	15	10	6	11

TABLE 6.

ACCIDENT PRONENESS.

Children who have had previous accidents within last 2 years.

5-10 years		10-15 years	
Boys	Girls	Boys	Girls
15	5	11	3

TABLE 7.

PERIOD OF YEAR ACCIDENT OCCURRED.

					5-10 years		10-15 years	
					Boys	Girls	Boys	Girls
January	...	...	...	...	12	2	7	5
February	...	...	...	...	8	7	5	7
March	...	...	...	...	9	7	4	6
April	...	...	...	...	6	7	9	7
May	...	...	...	...	3	8	—	3
June	...	...	...	...	6	3	2	3
July	...	...	...	...	8	5	3	3
August	...	...	...	...	14	12	6	7
September	...	...	...	...	16	6	9	7
October	...	...	...	...	22	4	9	7
November	...	...	...	...	28	10	27	5
December	...	...	...	...	7	7	6	1

TABLE 8.
HOUSING OF PARENT OR GUARDIAN.
(HOME ACCIDENTS ONLY).

	Rooms					5-10 years		10-15 years	
						Boys	Girls	Boys	Girls
1	...	...	...	...	...	4	6	—	—
2	...	...	...	...	...	17	8	7	7
3	...	...	...	...	...	26	24	14	22
4	...	...	...	...	...	25	20	13	22
5 +	...	...	...	...	...	6	5	3	6
Unable to locate	...	...	...	...	...	11	13	9	2
No information available	...	...	...	...	...	1	1	2	—

SPEECH THERAPY.

Mrs. E. MacDonald, Senior Speech Therapist.

During this session there has been an innovation in staffing. For the first time, a part-time therapist has been employed. As there is a shortage of speech therapists, she is a welcome addition to the ranks.

There is an increasing tendency for speech therapists to employ mechanical aids in treatment. A Bell & Howell Language Master has been installed in Kelbourne School for use by the delayed speech group and the cerebral palsied. This is basically a tape-recorder which allows the child simultaneously to look at a picture, see its written name and hear it correctly articulated. There is additional space for him to record his own articulation in juxtaposition to the presented word, thus giving easy comparison. In this way he has the visual stimulus of the picture and written symbols to reinforce the auditory stimulus in the learning of a given word.

In the Summer of 1966 the National Conference of Speech Therapists was held at Jordanhill College of Education. A paper was presented by the Senior Speech Therapist, Miss Dorothy McKirdy, based on research carried out by the Glasgow therapists working in schools for mentally handicapped children. A test in the comprehension of spoken language was given to a number of children requiring speech therapy. The same test was administered to a number of children not requiring speech therapy, to provide a control group. The children were first made familiar with the vocabulary to be used and then were asked to carry out commands of graded complexity. I.Q. was taken into account and the ages of the children noted.

Results showed :—

- (a) That the I.Q. of the speech cases tended to be lower than those of the control group.
- (b) Speech cases obtained a significantly lower score in response to commands than did control group.
- (c) Cases in the control group tended to have a higher score than speech cases at a comparable age, although this effect was nullified by 8-10 years. It would appear, therefore, that non-speech cases have the ability to learn more quickly. However, once the speech cases are old enough to assimilate the vocabulary the difference in comprehension facility ceases to become a significant factor in test performance.
- (d) In general, good environment raised the score obtained.

The work of the speech therapists during the year is summarised as follows :—

	Advice only	Cases treated	No. of treat- ments	Home visits	School visits
Children attending—					
Schools for Physically Handi- capped	—	44	780	19	22
Schools for Mentally Handi- capped	46	414	5,970	26	297
Kelbourne School Cerebral Palsy Unit	—	20	874	—	All seen in school
Delayed speech group ...	—	23	2,000	—	All seen in school
Ordinary School	177	1,376	14,477	337	691
Pre-School	87	190	2,325	29	—
School for Deaf	—	74	1,410	—	All seen in school

IMMUNISATION CAMPAIGNS IN SCHOOLS.

DIPHTHERIA AND TETANUS

Two campaigns were undertaken during the calendar year (January to March and September to December), in schools to protect children against diphtheria and tetanus. In the first campaign diphtheria and tetanus toxoid injections were given mainly to children aged five and six, and booster doses of tetanus toxoid to children from nine to eleven years who had received tetanus immunisation in the previous year's campaign. In the second campaign, children aged five and six were

immunised for diphtheria and tetanus whilst a booster dose was given to all children who had received their initial tetanus toxoid injections previously.

Injections given by school medical officers were :—

	Diphtheria and Tetanus			Tetanus only			Total Doses
	First	Second	Re- inforcing	First	Second	Re- inforcing	
First Campaign	5,548	4,969	10,332	150	145	9,800	30,944
Second Campaign	6,562	5,994	10,366	41	53	1,072	24,088

POLIOMYELITIS

A "drive" to protect children of five and six years of age against poliomyelitis was conducted in schools concurrently with the diphtheria/tetanus campaign from September to December. Three doses of oral vaccine were given with an interval of four weeks between each. A fourth dose was given to children in the same age-group who had been immunised previously.

Oral doses administered by school nurses were :—

First	Second	Third	Re-inforcing	Total Doses
2,242	1,826	1,691	15,360	21,119

PREVENTION OF TUBERCULOSIS.

B.C.G. VACCINATION

The annual campaign in schools was conducted from October to December, 1966, and the results are given in the section on tuberculosis.

MASS RADIOGRAPHY

The School Health Service continued to arrange with the Mass Radiography Centre, Elmbank Street, for the X-raying of pupils attending Glasgow schools.

Dr. T. J. R. Miller, Medical Director of the Mass Radiography Service, tells us that—

Pulmonary tuberculosis was less frequent in both groups, the incidence of active lesions being 0.2 per 1,000 below and 0.4 per 1,000 above the rates recorded in the primary and re-examination groups respectively in 1965.

Active lesions were found in two boys (1.45 per 1,000) and two girls (1.68 per 1,000) X-rayed for the first time and in one boy (0.82 per 1,000) attending for X-ray.

Eight pupils with inactive lesions were equally divided between the primary (1.57 per 1,000) and the re-examined (1.77 per 1,000) groups. One (0.39 per 1,000) previously diagnosed case occurred in pupils X-rayed for the first time and three (1.33 per 1,000) X-rayed in previous years.

Of the 618 pupils not mantoux tested, one girl had an active lesion and one boy had hilar adenitis.

SURVEY OF FURTHER EDUCATION COLLEGES

In November/December, 1966, the Mass Radiography Service, Elmbank Street, X-rayed 5,626 students (5,255 males and 371 females) attending five colleges for further education, including annexes. Eighty (76 males and 4 females) were recalled for large film. The results were as follows :—

	Males	Females
Active or probably active pulmonary tuberculosis	4	1
Inactive pulmonary tuberculosis	1	1
Known pulmonary tuberculosis	5	—
Bronchial thickening	2	—
	12	2

Despite a small increase compared with a year ago, the total incidence of pulmonary tuberculosis (2.1 per thousand) remained satisfactorily low.

Students with abnormalities of any significance were informed and reports of findings were sent to their doctors. Appointments to attend their area chest clinics would be sent to those requiring assessment and observation.

TEACHERS' SICK PAY REGULATIONS

During the year ended 31st December, 1966, teachers to the number of 2,272 (934 males and 1,338 females) were X-rayed by the Department.

The numbers recalled for large film (including reports from chest physicians) were 40 men and 42 women, the diagnosis being as shown :—

	Males	Females
Active pulmonary tuberculosis	—	—
Inactive pulmonary tuberculosis (including calcified or fibrotic conditions)	14	19
Inactive pulmonary tuberculosis (pleural thickening)	1	—
No apparent defect	18	18
Old thoracoplasty—remaining lung clear ...	1	—
Bone defects	2	2
Chronic bronchitis and emphysema	1	—
Bronchial carcinoma	1	—
Cardiac hypertrophy	1	1
Bronchiectasis (long-standing)	—	1
Fibrosis following mastectomy and radiation ...	—	1
Auricular fibrillation	1	—
	40	42

During the same year, 45 nursery assistants were examined.

RESIDENTIAL SCHOOLS.

The centres outwith the City are listed below along with the accommodation available for pupils. Periods of residence varied according to the needs of the individual child and averaged four weeks for the normal child, four to six weeks for convalescents and two weeks for nursery children.

(i) NORMAL

Achnamara, Lochgilphead ...	48 Protestant boys and girls (Secondary, 1st year).
Dalguise, near Dunkeld ...	48 Roman Catholic boys and girls (Primary V, VI and VII).
Galloway, Wigtown	112 Protestant boys and girls (Primary V, VI and VII).

(ii) CONVALESCENT

Agnes Patrick/Stevenson, Ascog	58 Roman Catholic boys and girls (8-15 years).
Caol Ruadh, Colintrave ...	36 Protestant boys (8-15 years).
Castle Toward, by Dunoon ...	100 Protestant boys and girls (8-15 years).
Craig, Kilmarnock	56 Roman Catholic boys (5-12 years).
Hillfoot, Bearsden	45 Protestant mentally handicapped children (8-14 years).
Lumsden, Maybole	29 Roman Catholic girls (5-12 years).
Seafield, Ardrossan	68 Protestant boys (5-12 years).
South Park, Ascog	28 Protestant girls (5-15 years).
Fornethy, near Alyth	74 Protestant girls (5-12 years).

(iii) NURSERY

Southannan, Fairlie	36 Protestant and Roman Catholic boys and girls (2-5 years).
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ARRANGEMENTS FOR FEEDING AND CLOTHING OF CHILDREN.

These arrangements are under the administration of the School Welfare Section of the Education Department.

(a) ADMINISTRATION AND NATURE OF MEALS

On 31st December, 1966, there were 120 kitchens preparing meals for school children. In addition, one kitchen supplied Kosher meals to Jewish children. On an average day in October, 1966 (Monday, 24th October), the total number of dinners served was 83,658 of which 20,955 were supplied free.

Dinners only were supplied to pupils of ordinary schools and schools for handicapped children. In nursery schools dinners and teas were served, while a Health and Welfare day nursery received breakfasts, dinners and teas.

Choice of menu has been extended and is at present operating at 16 schools. The service is cafeteria type and the pupils have a choice of two or three main dishes, two vegetables and two or three sweets. This has proved successful both in primary and secondary schools and it is hoped to extend it to other schools. The success of this service depends to a large extent on the co-operation of the Head Teacher and his staff as good discipline in the dining-room is essential.

The meals were served in 404 dining-rooms, 377 of which were on school premises, the remainder being in church and other halls.

(b) NUMBER AND COST OF MEALS

The number of dinners prepared in kitchens during the year ended 31st December, 1966, was 17,467,364.

Weekly tickets were purchased by pupils requiring dinners in schools at the following prices :—

For 5 meals per week—4s. 9d. for the first child of a family, 4s. 4d. for the second and 3s. 11d. for the third and subsequent children; equivalent prices for 6 dinners were 5s. 7d., 5s. 2d. and 4s. 9d. Remission rates for 3s. 11d., 3s., 2s. or 1s. (based on family income) were charged for a ticket valid for 6 dinners per week, the price being the same for each member of the family.

In schools for handicapped children the prices were 1s. 10d. and 2s. 1d. for 5 and 6 dinners respectively or at remission for 6 dinners of 2s. and 1s.

On Saturdays and holidays, meals were supplied to children entitled to free meals and to children who held tickets purchased at partial remission rates. In addition to this, during holidays only, meals were supplied to children holding purchased tickets at normal prices and whose parents were unable to make suitable arrangements to provide a midday meal.

(c) SPECIAL DIETS

The following table shows the numbers of children provided with special diets on the authority of the School Health Service.

Type of Diet	Primary Schools		Secondary Schools		Special Schools and Occupational Centres	
	Boys	Girls	Boys	Girls	Boys	Girls
Coeliac	15	21	1	1	4	4
Weight reducing	2	4	1	4	2	8
Non-greasy	—	—	—	2	—	—
Diabetic	5	2	7	3	1	1
Lawrence line	2	2	—	—	—	—
Phenylketonuria	—	—	—	—	3	1
Ulcer diet	—	—	—	1	—	—
Free from fish and eggs	—	—	—	1	—	—
Low residue	—	—	1	—	—	—
Low fat—high protein	—	1	—	—	—	1
Starch free	—	—	—	—	1	—
No egg or tomato	—	—	—	—	1	—
	24	30	10	12	12	15
Totals	54		22		27	

(d) FOOTWEAR AND CLOTHING

During the year 2,957 children were provided with footwear and clothing as compared with 2,858 during the previous twelve months. The undertaking given by the National Assistance Board to accept responsibility for the clothing needs of children of their dependents continued satisfactorily.

(e) MILK SUPPLIED TO SCHOOL CHILDREN

All milk supplied to schools under the Milk in Schools Scheme was pasteurised.

The total number of milk rations during the year was 33,895,921. The most recent census figures showed that 96·40 per cent. of the children present in school on a particular day in January, 1966, were taking school milk compared with 95·30 per cent. in January, 1965, and 96·19 per cent. in May, 1964.

PHYSICAL EDUCATION, 1965-66.

Mr. W. Tinto, Adviser in Physical Education.

In common with other specialist subjects, the Department of Physical Education has had to contend with shortage of staff and the problem of accommodating reduced staff to the increasing requirements in secondary schools is escalating to unmanageable proportions. Fourteen uncertificated women teachers are assisting to the best of their experience and ability by taking classes in swimming, dancing and games which form one aspect of the subject but this help only approximates to the assistance which can be given by fully qualified and certificated personnel.

The shortage of specialised staff is detrimental to the work in primary schools where visits and demonstration, by specialised teachers, at one time an excellent feature of the Glasgow Physical Education administration, has had to be discontinued. This deficiency has been partly offset by the running after school hours by the advisory staff of courses for teachers of primary schools—courses, for example, on netball coaching, on swimming and on other games, all of which have been most successful. Unfortunately many interested primary teachers find it inconvenient to attend courses at this time.

In secondary schools the year has been marked by an increase in the facilities for physical education. For example, two new games halls have been opened at Cadder and Castlemilk, two new swimming pools have been opened, one at Adelphi and one at Craigbank and Lochend playing field has now been completed. All of these, with the opening of three new secondary schools form excellent supplements to existing accommodation.

The year has been marked by a series of demonstrations and courses run in conjunction with the many recreational activities which are forming an important aspect of physical education. Demonstrations on golf, tennis and fishing have taken place in the games halls before audiences of 500 pupils and successful courses, after school between 4.30 and 6 p.m., on fishing, fencing and athletics, have all been enthusiastically attended by many secondary school teachers. It is interesting to note that many of the teachers attending are other than teachers of physical education. The interest in recreational activities is reflected in the efforts of Head Teachers to modify timetables in order to include such activities in their programme and the Education Committee, in so far as has been possible, with restrictions in spending,

continues to keep abreast of modern educational thought and practice by supplementing, where possible, the efforts of schools in the matter of equipment.

The interest in Health Education as a subject for study for the Ordinary and Higher Leaving Certificate, shows a marked increase in certain schools and the subject of Physical Education now includes in its provision, a health education classroom.

DENTAL INSPECTION AND TREATMENT.

Mr. M. L. H. Davies, Chief Dental Officer.

Dental Auxiliaries. The dental auxiliary scheme was introduced for a five-year experimental period. This period is now over and the General Dental Council have recently produced their report on the matter. In general, their findings show that the auxiliaries have a useful and worthwhile contribution to make in helping to relieve the present shortage of dental surgeons. In Glasgow we have had four dental auxiliaries on our staff for nearly four years and they have proved themselves to be very satisfactory, both by their high standard of work and by their capable and sympathetic handling of children. I consider, however, that parents should be made more aware of the fact that their children may be treated by auxiliaries and not left to assume that dental surgeons are operating on them. To this end, it is proposed to initiate the use of small name plates on surgery doors clearly indicating the name and designation of the operator. One disadvantage in employing dental auxiliaries is that, as they require to be under direct supervision of a dental officer when they carry out the minor dental treatment they are allowed to do, this necessitates the use of surgeries in pairs. A second disadvantage is that, in the absence of the dental officer, they must cease all treatment other than cleaning and polishing teeth.

Refresher Course. During the year all our dental officers attended a short refresher course at Glasgow Dental Hospital. The fact that the course was run exclusively for our staff enabled us to select the subjects being dealt with and as a result it proved to be unusually beneficial. One direct result of the course was that the number of root treatments carried out was increased by over 300 per cent. over the previous year.

Routine Dental Inspections. A new method of carrying out dental inspections has now been put into practice. This method avoids involving school staff in clerical work.

Orthodontics. As the second stage of the expansion of this side of our service, orthodontic treatment has now been made available in four additional clinics; children attending these clinics will still have the benefit of our orthodontic specialists' advice when necessary, but will be spared the inconvenience of frequent travelling to a central clinic.

Emergency Cases. For the first time separate figures are available for the number of children attending clinics specially for the relief of "toothache." The over-all average for all clinics is surprisingly small, the number being 0.55 per session.

Expansion of Dental Service. In order to be able to offer a dental service in Easterhouse and Castlemilk areas, permission was obtained to increase our establishment by three dental officers, making a total of 22. As no suitable accommodation is available two of these dental officers will operate in self-propelled caravan-type surgeries, travelling round from school to school. The third dental officer will work in Wellhouse Crescent Clinic, Easterhouse.

To cope properly with our share of the dental treatment of Glasgow school children, a further 36 dental officers would be required. In our City we have at present an establishment which gives (including dental auxiliaries) the equivalent of one dental officer to 7,300 children. The Scottish average is one dental officer to 3,000. It is estimated that last year there were 85,000 children in Glasgow who required dental treatment, but did not receive it either from our own service or from general dental practitioners. Further expansion of the school dental service will obviously be required and full use will also have to be made of all available preventive measures, especially fluoridation which, in time, could effectively and safely cut dental decay by 50 per cent. and could ultimately bring the problem to manageable proportions.

Dental Health.—During the year 20,000 tooth-cleaning packs were sent to schools for distribution to new school entrants. These packs contained a Happy Smile Club card, toothpaste, toothbrush, bathroom instruction card and a letter from our Department. They were backed by talks from a dental auxiliary or from class teachers. A survey of 812 parents taken three months after distribution showed that 47 per cent. considered that the pack had a good effect on their child's dental habits, 30 per cent. considered it had a moderate effect and 23 per cent. considered it had no effect, or had only resulted in a temporary improvement. Dental health education requires to be pushed repeatedly to be effective as it is necessary not only to teach the children how to achieve good dental health, but it is also necessary to educate their

parents whose bad eating habits they copy. Pleasure-giving but bad dietary habits, the main cause of dental decay, will not be easily changed, but our efforts to correct them are more than justified by the benefits which could be gained.

Productivity. Our figures for the year again show an improvement in work done per treatment session, the increase in fillings over the previous year being more than 9 per cent. In spite of this increase a good standard of work has been maintained.

The National Health Service Act was amended during the year to allow expectant and nursing mothers to receive free treatment from general dental practitioners as well as in local authority clinics. Since then, in common with other local authorities, we have had a steadily decreasing number of mothers applying for treatment in our clinics.

GOITRE SURVEY.

Dr. T. S. Wilson.

During the autumn session, 1966, a goitre survey was conducted by Dr. W. R. Greig (Glasgow Royal Infirmary) and associates, in four primary and four secondary schools in Glasgow. Similar surveys were made in Dumfries and Nithsdale. The comparative figures for the three areas are now given:—

		Glasgow		Dumfries		Nithsdale	
		Female	Male	Female	Male	Female	Male
Aged 5-10 years	No.	691	635	249	272	145	137
	%	13.0	12.4	15.7	13.2	28.9	29.9
Aged 11-15 years	No.	1,740	1,682	250	197	101	103
	%	15.6	11.4	21.2	11.7	28.7	31.1

In both Glasgow and Dumfries the goitre rate was influenced by sex and age, high rates being found in girls aged 11-15 years. In contrast, in Nithsdale, in both the younger (5-10 years) and in the older children (11-15 years), boys and girls alike—the goitre rate was consistently high, varying only between 28.7 per cent. and 31.1 per cent.

The investigators concluded that whereas in Glasgow and Dumfries the chief cause of goitre is an intrinsic female endocrine factor, in Nithsdale it is mainly environmental. The environmental factors are probably an iodine-deficiency state or substance in the local vegetation, water and milk which cause the goitre.

This survey was fully reported in the *Lancet*, 18.3.67. Pages 590-592—"Simple Goitre in Glasgow and Dumfries School Children"—W. R. Greig and associates.

SANITARY CONDITIONS OF SCHOOLS.

In accordance with the provisions of the Education (Scotland) Act, 1962, school medical officers visit the various schools (including residential and nursery schools) in the course of the year and any defects found are reported to the appropriate Department for the necessary action to be taken. On the occasion of each visit to the school the doctor also takes the opportunity of interviewing the Head Teacher and class teachers for the purpose of discussing with them the health and well-being of their pupils and giving advice in particular cases.

During the year, 196 visits were paid to 190 schools for the purpose of general inspection. In the same period 60 visits were made to 57 kitchens and dining halls where meals for school children were prepared and served.

SOME INTERESTING POINTS ABOUT THE OLDER GLASGOW SCHOOLS.

Dr. Logan, School Medical Officer.

A few schools remain in Glasgow from the days before compulsory education; one of the oldest is William Street Nursery School, opened as St. Matthew's Free Church School in 1844. The oldest used as a primary school is John Street, once Bridgeton Free Church School (1851). Both are plain, unpretentious buildings. Larger and more impressive are: the old Normal School (now Dundas Vale Nursery School) which, erected in 1836, appears to be the oldest still used for educational purposes; St. Kentigern's, Duke Street, opened about 1860 as Alexander's School; and the "Academia Parochialis de Poloc, Culturae Christianae Dedicata" in 1861, as an inscription tells us—now an annexe of Maxwell School, Pollokshaws. This last is the Romanesque style with an attractive clock tower, making quite a striking group with the adjoining church and burgh hall. The other two also have clock towers; the one at Dundas Vale seeming to be alone in having an operative clock. The centre block of the High School, originally Glasgow Academy, dates from 1845, but has been much altered.

In the first fifteen years of the School Boards, from 1874, two-storey yellow stone buildings were usual. The best designs had to be learned from experience and some, which were very old-fashioned even then, were erected—real “schoolhouses” with massive gable-ends. Rockvillia School has the air of a villa, with bow windows (and spiral stairs). The janitor’s house has crow-stepped gables. (These houses would be an interesting study, incidentally, for someone. Some adjoin their school, others are quite separate. Some, like Mount Florida’s, are underneath and now, at Possilpark, we have an example of “penthouse accommodation” on the roof of the new school.)

Better examples broke away from the “schoolhouse” with its dark, narrow stairs and passages, e.g. Camlachie School (1878) has broad, adjoining central staircases, well-lit from above. A three-storeyed building, with the rooms round a central well, became the common pattern. Petershill School is typical, with its framework of stairs filling the well-space, an arrangement almost incomprehensible to strangers. From the 1890’s on, most Board schools had the stairs at the ends, a great improvement, with galleries connecting the rooms round the well; 1895 to 1914 saw the familiar excellent, red sandstone buildings put up, perhaps the classic era of school design. Staffrooms, cloakrooms and offices were often on mezzanines opening on to the stairs in the largest schools, e.g. Quarry Brae, like the towers of a castle. The last development of these schools was the extension of the top floor over the well to form another assembly space, as at Cuthbertson and Bluevale. This “golden age” ended in 1914; its last products were Onslow and Calder Street.

The enterprising Cathcart Board opened Battlefield Infants’ School (now burnt, alas) and Holmlea in 1908, with gymnasia (physically separated) and an individual classroom with sink to each class, each opening also to the corridor; the windows had those splendid geared mechanisms, operated by rotating a handle which cost the Board £2 6s. 11d. each. A doctor’s room, which doubled in Holmlea as a music room, was provided. The Board’s Chairman was a Doctor William Watson, and the architect was Alexander Balfour. Latterly this Board chose its architects by open competition, the (anonymous) entries being judged by an “Architectural Assessor” and an “Educational Assessor” (a headmaster) sitting together.

The Govan Parish Board had eight schools with swimming pools. The oldest, Bellahouston Academy (now Govan High School), privately built and opened in 1876, had also gymnasia for boys and for girls. Financial difficulties led to its sale to the Board in 1885. Thereafter

ponds were built, either in an out-building or in the basement, of seven more. Since two of these were converted to gymnasia in the '30s, only five remain : in Lorne Street, Strathbungo, Greenfield, Balshagray and Church Street. After 1909 not another was erected for more than half a century.

The Roman Catholic schools built from 1890 are interesting for the ingenious use of restricted ground space. Several combined " Church-Schools " were built—St. Luke's, Ballater Street is, I believe, the only remaining example with the original arrangement. Here, the church occupies the ground floor and the school the three above. Roof playgrounds were numerous at one time, the walls being extended about five feet above roof level like " ramparts." St. Mary's, Calton, and Our Lady and St. Margaret's, Kinning Park, are the only remaining ones I know. The last-named is remarkable, as it has also an interior playground occupying the second floor. Other examples of ingenious saving of space are the location under the school of play-sheds and cloakrooms (as at Albert Road). Building up was resorted to rarely : Hillhead Primary School (five storeys) is still, I believe, the highest school building in the City.

Various artistic embellishments are to be seen—a few examples are the statues on the High School facade (including, I think, Homer and Aristotle) ; the medallions carved on Abbotsford include the head of the National Bard as well as the owner of the eponymous estate. Quarry Brae School has small panels of curved, stained glass in the vestibules, and in the hall a large number of coloured tiles, alternating lions and dragons—I regret to see that one lion has lately been drilled through by an electrician. Colston School has very fine Corinthian pillars in its hall (Maryhill Board, 1909).

It is well known that Scotland Street School is by the famous Charles Rennie Mackintosh. While pleasing in external appearance and in details, such as the ironwork indoors, from a practical standpoint the only exceptional feature, perhaps, is that each cloakroom has separate exits and entrances. This is not the only school with a " charmingly diminutive " entrance for infants.

SURVEY—HOUSING CONDITIONS OF GLASGOW SCHOOL CHILDREN IN THE YEAR 1966.

It has been the practice, at varying intervals since the year 1924, to incorporate in the Annual Report a survey of the housing conditions

of the children seen at routine medical inspection during the school year selected, the size of house and the total number of inmates being noted, such information providing the basis for demonstrating a relationship between the health of the school child and the housing conditions.

In 1956 the scope of enquiry was extended to include for each pupil the type of family (tenant, lodger, etc.) number over and under 10 years and the actual accommodation used.

The statistical matter has been arranged in the following pages to show comparison, where possible, with similar data obtained in previous surveys (including information from a report by Sir Leslie Mackenzie in 1906). Some of the tables employed before have, therefore, been retained but others have been discontinued and new ones created to present the additional information. The figures apply only to the scholars examined and not to housing in the City as a whole. A comparison between School and City Assessor's return is given here.

			No. of Occupied Houses in City (per City Assessor's Return)		No. of Houses in School Children Survey	
1 apartment	...	...	25,121	(7.9%)	520	(1.7%)
2 apartments	...	...	84,855	(26.8%)	5,517	(18.4%)
3 apartments	...	...	118,818	(37.4%)	10,978	(36.5%)
4 apartments	...	...	64,215	(20.2%)	9,149	(30.4%)
5 + apartments	...	...	24,706	(7.7%)	3,916	(13.0%)
			317,715	100.0	30,080	100.0

Where any discrepancies are observed between the comparable numbers of children in this Appendix and in an earlier part of the Report, and between the different Tables in the Appendix itself, these are due to the fact that the information for each child was not always complete.

Table A.1. The number of children examined was not necessarily equalled by the number of houses because children in the same household might, in a few instances, have been examined during the period in the same age-group (twins) or other age-groups (brothers and sisters of different ages). Nine-year-old children are not included, as the routine medical inspection of this age-group was discontinued after the

1963 school year. The information given in this Table forms the basis for analysis of Tables A.2 and A.3.

Table A.2. The movement of the population from the smaller to the larger houses is shown. Most consistent improvements were in respect of people living in two-apartment and four-apartment houses; in the former, the percentage of 65.9 in 1912 improved to 18.3 in 1966, whilst in the latter, the improvement in the same period was from 3.6 per cent. to 30.4 per cent. Another notable feature was the smaller proportion of one-apartment houses which decreased from 11.3 per cent. in 1912 to 1.7 per cent. in 1966.

Table A.3. The overall average number of inmates per house was increased—the highest since the 1936 survey. Improvements were noted for children living in one-apartment and two-apartment houses.

Table A.4. It will be noted that, in general, the average number of inmates was greatest in houses occupied by the "Lodger" type of family, except in one-apartment houses where the average was greatest in the "Landlord" type of occupancy, and in four-apartment houses where the "Tenant" type was the greatest.

Table B.1. The consistent increase in the average measurements with each additional apartment is notable—the exceptions being limited to the children in four-apartment houses where a probable explanation is that there was an improvement but it was obscured by reason of the large numbers of children moving from the smaller houses. The general trend of increase in average measurements from year to year is less marked recently.

Table B.2. The number of inmates per house is shown in the Table as the equivalent in adults; i.e., each person aged 10 years and over equals one and each under 10 years equals a half. Perusal of the statistics shows that the general tendency, with some exceptions, was for the average measurements of 5-year-old boys to fall as the number of inmates increased and to rise as the number of apartments increased.

Table B.3. The average measurements of "ordinary" school children in two-apartment houses are shown in the Table to decrease as the number of inmates increase.

Table C.1. The correlation of the child's medical classification with the size of house is demonstrated clearly in this Table. With each increase in the number of apartments, the children in these houses tended to have decreased percentages of the "temporary" and less remediable defects.

Table C.2. The standards of occupancy for assessment of overcrowding adopted for the purposes of this Table and Table B.2 were based on the Housing Acts and were as follows :—Not overcrowded : one-apartment, 2 adults ; two-apartments, 3 adults ; three-apartments, 5 adults ; four-apartments, $7\frac{1}{2}$ adults ; five-apartments, 10 adults. Children under 10 years of age were each taken as half-an-adult, two of such children being regarded as the equivalent of one adult.

Medical classification and the degree of "overcrowding" were shown to be correlated in each of the types of occupancy. That is, each increase in overcrowded home conditions was accompanied by increased incidence of the less remediable types of ailment in the children drawn from such homes. Of the few exceptions to the rule most were found in the "much overcrowded" category and mainly under the "landlord" type of occupancy.

SUMMARY.

The housing conditions of Glasgow school children over the past 55 years have shown considerable improvement as evidenced by the progressive movement of families from smaller to larger houses (Table A.2) ; the rise of the four-apartment house and the fall of the "single-end" were notable. The average number of inmates per house was increased (Table A.3). An unsatisfactory feature, however, was that the "Lodger" type of occupancy (i.e., the sub-let accommodation) provided the largest number of inmates, on an average (Table A.4).

Average heights and weights of children from all sizes of house have shown consistent increase since 1906 (Table B.1) and close connection between the average measurements of the children and the conditions in which they lived are clearly indicated (Tables B.2 and B.3). Medical classification of the children according to severity of defect is seen to be linked with the size of the house (Table C.1) and the degree of overcrowding (Table C.2).

SURVEY—Table A.1—SUMMARY OF HOUSING INFORMATION PROVIDED BY PARENTS OF CHILDREN OF 5 AND 13 YEARS OF AGE AT THE TIME OF ROUTINE MEDICAL INSPECTION IN 1966.

Size of House		A = No. of Children Examined. B = No. of Inmates of all ages in the Houses.											
		One Apartment		Two Apartment		Three Apartments		Four Apartments		Five or more Apartments		Totals	
School or Class	Age	A	B	A	B	A	B	A	B	A	B	A	B
Non-Transferred	5 years ...	262	1,206	2,612	12,797	3,804	19,540	2,698	16,681	1,141	6,796	10,517	57,020
	13 years ...	58	240	867	4,231	3,012	14,650	2,905	16,593	1,517	8,524	8,359	44,238
	Total ...	320	1,446	3,479	17,028	6,816	34,190	5,603	33,274	2,658	15,328	18,876	101,258
Transferred ...	5 years ...	172	822	1,540	7,897	2,487	13,803	1,717	11,916	544	4,135	6,460	38,573
	13 years ...	26	122	440	2,317	1,543	8,374	1,718	11,297	682	4,890	4,409	27,000
	Total ...	198	944	1,980	10,214	4,030	22,177	3,435	23,213	1,226	9,025	10,869	65,573
For Physically Handicapped	5 years ...	1	6	6	31	12	59	7	38	3	20	29	154
	13 years ...	—	—	3	17	7	40	18	113	1	10	29	180
	Total ...	1	6	9	48	19	99	25	151	4	30	58	334
For Mentally Handicapped	5 years ...			9	43	22	120	12	75			43	238
	13 years ...	1	5	40	226	91	541	74	495	28	227	234	1,494
	Total ...	1	5	49	269	113	661	86	570	28	227	277	1,732
All Schools and Classes ...	5 years ...	435	2,034	4,167	20,768	6,325	33,522	4,434	28,710	1,688	10,951	17,049	95,985
	13 years ...	85	367	1,350	6,791	4,653	23,605	1,715	28,198	2,228	13,651	13,031	72,912
	Total ...	520	2,401	5,517	27,559	10,978	57,127	9,149	57,208	3,916	24,602	30,080	168,897

PERCENTAGES OF CHILDREN IN THE VARIOUS GROUPS DRAWN FROM HOUSES OF THE NUMBER OF APARTMENTS SHOWN.

Size of House.		One Apartment.				Two Apartments.				Three Apartments.				Four Apartments.				Five (or more) Apts.			
School or Class.	Year	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total
Non-Transferred	1912	Not available	Not available	Not available	9.7	Not available	Not available	Not available	64.9	Not available	Not available	Not available	18.7	Not available	Not available	Not available	4.1	Not available	Not available	Not available	2.6
	1924	17.5	14.1	9.4	15.3	88.9	61.9	67.2	61.0	16.3	16.5	17.1	16.5	3.9	4.5	3.9	4.1	3.5	2.9	2.5	3.2
	1931	15.4	10.2	7.1	11.4	52.0	51.2	50.8	51.4	21.7	25.7	27.6	24.6	7.3	8.3	9.8	8.2	3.6	4.7	4.8	4.3
	1936	15.2	8.6	5.2	9.8	46.7	46.5	43.8	45.7	26.2	30.0	33.5	29.8	8.9	11.0	12.7	10.8	3.0	3.9	4.8	3.9
	1944	14.5	10.5	6.3	10.8	44.2	43.1	38.7	42.2	25.9	28.3	31.9	28.4	11.4	13.9	17.0	13.8	4.1	4.2	6.1	4.7
	1951	12.1	8.0	4.8	8.7	37.9	38.0	35.4	37.1	26.5	27.8	28.3	30.3	17.1	19.4	23.8	20.0	6.0	6.7	7.7	6.8
	1956	10.4	4.2	2.7	5.9	35.2	27.6	23.5	29.2	26.8	32.3	32.4	30.3	20.7	27.1	31.1	25.9	7.2	8.8	10.3	8.7
Transferred	1961	31.3	2.6	1.0	3.0	21.7	15.5	22.9	22.9	33.5	35.1	37.4	35.4	21.2	27.8	32.0	26.9	8.7	12.8	13.9	11.7
	1966	2.5	—	0.7	1.7	24.8	—	10.4	18.4	36.2	—	36.0	36.1	25.7	—	34.8	29.7	10.8	—	18.1	14.1
	1912	Not available	Not available	Not available	16.9	Not available	Not available	Not available	69.6	Not available	Not available	Not available	10.9	Not available	Not available	Not available	1.8	Not available	Not available	Not available	0.5
	1924	27.0	20.1	15.5	22.0	61.6	67.5	71.1	65.8	8.4	9.8	11.4	9.6	2.0	1.7	1.6	1.8	1.0	0.9	0.4	0.9
	1931	22.6	18.1	12.1	18.3	59.3	60.1	60.6	59.9	14.2	16.6	20.3	16.6	2.8	3.4	5.0	3.6	1.1	1.7	2.0	1.5
	1936	19.2	13.3	8.5	13.9	50.2	53.7	51.9	51.9	22.8	24.7	28.4	25.2	6.4	6.8	8.9	7.3	1.5	1.5	2.3	1.7
	1944	19.7	12.3	7.4	14.1	47.2	45.1	42.2	45.2	22.3	27.9	31.1	26.4	8.3	11.3	15.3	11.1	2.4	3.3	3.9	3.1
For Physically Handicapped	1951	17.3	10.3	7.4	11.9	42.0	41.2	36.8	40.0	21.6	25.5	25.7	24.1	15.3	17.2	23.3	18.5	3.9	5.8	6.8	5.4
	1956	12.1	6.1	3.9	7.9	36.9	30.5	27.3	32.1	25.9	28.7	28.6	27.6	19.2	26.4	30.9	24.8	5.9	8.3	9.3	7.6
	1961	7.3	2.7	1.5	4.2	32.4	24.5	16.3	25.2	32.2	32.3	35.3	33.2	21.8	29.9	35.7	28.4	6.3	10.7	11.2	9.1
	1966	2.7	—	0.6	1.8	23.8	—	10.0	18.2	38.5	—	35.0	37.1	26.6	—	39.0	31.6	8.4	—	15.5	11.3
	1912	Not available	Not available	Not available	12.5	Not available	Not available	Not available	71.7	Not available	Not available	Not available	15.1	Not available	Not available	Not available	0.7	—	—	—	—
	1924	24.3	22.1	15.2	20.7	67.9	66.2	71.4	68.3	7.9	9.2	12.1	9.7	—	1.9	1.0	1.0	—	0.6	0.3	0.3
	1931	18.1	17.4	11.1	15.9	60.6	57.9	62.6	59.5	18.9	19.4	20.5	19.6	2.4	4.2	4.7	4.0	—	1.2	1.1	0.9
For Mentally Handicapped	1936	20.6	15.2	11.4	14.6	45.1	50.3	50.7	49.8	24.5	26.7	29.1	27.2	8.8	7.1	7.5	7.4	—	0.7	1.3	0.9
	1944	35.0	11.7	14.4	16.4	37.5	55.3	44.8	47.8	22.5	23.3	22.4	22.8	5.0	7.8	12.8	9.7	—	1.9	5.6	3.4
	1951	27.3	15.2	12.8	15.4	45.5	43.7	30.8	38.6	9.1	18.7	23.4	19.7	18.2	17.0	26.6	21.0	8.0	5.4	6.4	5.3
	1956	20.0	15.6	5.4	12.9	40.0	34.4	33.9	35.1	16.0	23.3	26.8	23.4	16.0	23.3	32.1	25.1	—	3.4	1.8	3.5
	1961	13.3	6.7	—	6.8	26.7	13.3	14.3	18.2	40.0	20.0	21.4	27.3	13.3	26.7	28.6	22.7	6.7	33.3	35.7	25.0
	1966	3.4	—	—	1.7	20.7	—	10.3	15.5	41.4	—	24.1	32.8	24.1	—	62.1	43.1	10.3	—	3.4	6.9
	1912	Not available	Not available	Not available	19.1	Not available	Not available	Not available	63.8	Not available	Not available	Not available	14.9	Not available	Not available	Not available	2.1	—	—	—	—
All Schools and Classes	1924	—	27.3	18.5	22.2	—	63.4	66.0	65.1	—	8.1	13.0	10.8	—	1.2	1.7	1.4	—	—	0.8	0.5
	1931	11.1	20.5	15.4	18.0	88.9	63.2	61.7	63.1	—	13.2	19.7	15.8	—	2.3	2.1	2.2	—	0.9	1.1	1.0
	1936	—	22.5	14.0	17.4	—	41.6	51.3	47.4	—	28.7	24.8	28.4	—	6.2	8.9	7.8	—	1.0	1.0	1.0
	1944	—	18.0	12.9	14.6	—	47.0	42.3	43.7	—	26.0	29.4	28.1	100.0	7.0	13.4	11.5	—	2.0	1.0	1.0
	1951	22.2	17.1	12.6	14.2	—	46.9	38.6	40.6	55.6	18.3	21.0	20.8	11.1	12.8	20.2	17.7	11.1	4.9	7.6	6.8
	1956	25.0	9.3	6.4	8.2	18.8	37.4	34.2	35.2	18.8	25.6	28.5	26.9	31.3	23.2	25.8	24.8	6.3	4.5	5.1	4.9
	1961	3.8	4.8	—	5.1	30.8	28.6	21.7	24.6	38.5	31.0	34.9	33.6	23.1	24.3	30.1	27.6	3.8	11.4	7.8	9.0
	1966	—	—	0.4	0.4	20.9	—	17.1	17.7	51.2	—	38.9	40.8	27.9	—	31.6	31.0	—	—	12.0	10.1
All Schools and Classes	1912	Not available	Not available	Not available	11.3	Not available	Not available	Not available	65.9	Not available	Not available	Not available	17.3	Not available	Not available	Not available	3.6	Not available	Not available	Not available	1.9
	1924	19.8	15.9	12.8	17.2	59.6	63.3	68.6	62.4	14.3	14.6	14.3	14.5	3.4	3.7	2.8	3.4	2.9	2.4	1.5	2.5
	1931	17.4	12.4	8.6	13.3	54.1	53.7	53.8	53.9	19.6	23.2	25.3	22.4	6.0	6.9	8.3	6.9	2.9	3.8	3.9	3.5
	1936	16.3	10.1	6.4	11.1	47.7	48.4	46.2	47.5	25.2	28.6	31.9	28.5	8.2	9.7	11.5	9.8	2.6	3.1	4.0	3.2
	1944	16.1	11.1	6.8	11.8	45.1	43.9	39.7	43.1	24.8	28.1	31.5	27.8	10.4	13.0	16.5	13.0	3.6	3.9	5.5	4.2
	1951	13.8	8.9	5.8	9.7	39.1	35.9	33.0	38.0	25.1	26.9	27.3	26.4	16.6	18.6	23.5	19.5	5.4	7.4	6.4	6.4
	1956	10.8	4.9	3.3	6.6	35.8	28.7	25.0	30.2	26.5	31.1	31.3	29.4	20.1	26.8	30.6	25.6	6.8	8.5	9.8	8.2
	1961	6.0	2.7	1.3	3.4	31.7	22.7	15.8	23.7	33.0	34.1	36.9	34.7	21.4	28.4	33.0	27.4	7.8	12.1	13.0	10.8
	1966	2.6	—	0.7	1.7	24.4	—	10.4	18.3	37.1	—	35.7	36.5	26.0	—	36.2	30.4	9.9	—	17.1	13.0

Note.—Routine medical inspection of 9-year-olds discontinued after 1963.

SURVEY.—Table A.3.—ANALYSIS OF HOUSING INFORMATION PROVIDED BY PARENTS IN THE YEARS 1912, 1924, 1931, 1936, 1944, 1951, 1956, 1961 AND 1966.

AVERAGE NUMBER OF INMATES OF ALL AGES PER HOUSE.

Size of House.		One Apartment.				Two Apartments.				Three Apartments.				Four Apartments.				Five (or more) Apts.				Totals.				
School or Class.	Year	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	5 yrs.	9 yrs.	13 yrs.	Total	
Non-Transferred	1912	Not available	Not available	Not available	4-1	Not available	Not available	Not available	6-2	Not available	Not available	Not available	6-9	Not available	Not available	Not available	6-4	Not available	Not available	Not available	6-5	Not available	Not available	Not available	6-1	
	1924	5-0	4-8	5-2	4-9	5-8	6-0	6-8	5-9	5-8	6-0	6-5	6-0	6-0	5-7	5-9	6-3	6-6	6-3	6-4	6-4	5-6	5-8	6-6	5-8	
	1931	4-7	5-0	5-0	4-8	5-3	5-5	5-5	5-5	5-5	5-6	5-7	5-8	5-8	5-8	6-1	6-1	6-1	6-0	5-8	6-0	5-5	5-6	5-6	5-5	
	1936	4-7	4-8	4-7	4-6	4-8	5-1	5-0	5-0	5-0	5-2	5-4	5-2	5-3	5-6	5-9	5-6	5-8	5-9	5-9	5-8	5-0	5-3	5-2	5-2	
	1944	4-7	4-9	5-0	4-8	4-9	5-0	5-0	5-0	5-1	5-2	5-2	5-2	5-8	5-8	6-0	5-8	5-8	5-9	6-1	5-9	6-1	5-3	5-3	5-1	
	1951	4-7	4-9	4-7	4-8	4-9	4-9	4-9	4-8	4-9	4-9	4-7	4-7	4-8	5-8	5-6	5-6	5-6	5-6	5-7	5-7	5-7	5-1	5-1	5-1	5-1
	1956	4-8	5-1	4-4	4-8	4-9	5-1	4-9	4-9	4-9	5-0	4-2	4-7	4-7	6-0	5-8	5-5	5-7	5-8	5-7	5-6	5-3	5-1	5-1	5-1	5-4
1961	4-6	—	4-1	4-5	4-9	4-9	—	4-9	4-9	5-1	6-2	—	5-0	6-2	—	—	5-9	6-0	—	5-8	5-4	—	—	5-3	5-4	
1966	4-6	—	4-1	4-5	4-9	4-9	—	4-9	4-9	5-1	6-2	—	5-0	6-2	—	—	5-9	6-0	—	5-8	5-4	—	—	5-3	5-4	
Transferred	1912	Not available	Not available	Not available	4-9	Not available	Not available	Not available	6-4	Not available	Not available	Not available	7-5	Not available	Not available	Not available	8-0	Not available	Not available	Not available	8-0	Not available	Not available	Not available	6-3	
	1924	5-3	5-5	5-4	5-4	5-9	6-4	6-4	6-4	6-4	7-1	7-1	7-3	6-8	7-5	7-1	7-4	7-7	8-1	7-8	7-2	6-1	6-3	6-3	6-2	
	1931	5-4	5-5	5-3	5-4	6-0	6-3	6-2	6-2	6-2	6-9	6-9	6-6	6-6	7-0	7-3	7-3	7-5	7-4	7-6	6-9	6-1	6-3	6-3	6-2	
	1936	5-1	5-2	4-9	5-1	6-0	6-2	6-1	6-1	6-1	6-5	6-7	6-6	6-6	7-6	7-6	7-2	7-2	7-5	7-1	6-6	6-9	6-3	6-2	6-2	
	1944	4-8	5-2	5-1	4-9	5-4	5-1	5-7	5-6	6-1	6-1	6-8	6-0	6-2	7-3	7-1	6-9	7-1	8-1	7-6	7-9	7-8	6-1	6-0	5-9	
	1951	5-1	5-3	5-3	5-2	5-6	5-8	5-7	5-7	5-7	6-1	6-3	6-0	6-1	7-1	6-8	6-9	6-9	7-8	7-8	7-9	7-8	6-0	6-2	6-1	6-1
	1956	5-1	5-3	5-6	5-2	5-5	5-6	5-5	5-5	5-5	5-7	5-6	5-5	5-6	6-9	6-6	6-6	6-6	7-6	7-4	7-2	7-4	5-9	6-0	5-9	
1961	5-1	5-4	4-6	5-1	5-4	5-5	5-5	5-4	5-5	5-5	5-5	5-4	5-5	6-9	6-9	6-6	6-7	7-6	7-5	7-0	7-3	5-9	6-2	5-9	6-0	
1966	4-8	4-7	4-7	4-8	5-2	5-1	—	5-3	5-2	5-6	—	5-4	5-5	6-9	6-9	6-6	6-8	7-6	7-2	7-4	7-4	6-0	—	6-1	6-0	
For Physically Handicapped	1912	Not available	Not available	Not available	5-5	Not available	Not available	Not available	6-8	Not available	Not available	Not available	7-8	Not available	Not available	Not available	6-5	Not available	Not available	Not available	8-4	Not available	Not available	Not available	6-8	
	1924	6-1	5-4	4-8	5-6	7-0	7-1	6-5	6-8	8-0	7-4	7-6	7-6	7-8	—	—	—	—	7-5	10-0	8-4	—	6-7	6-2	6-6	
	1931	5-1	5-0	5-0	5-1	6-6	6-2	6-0	6-2	6-6	6-7	6-0	6-7	7-6	8-0	5-7	6-9	6-3	5-4	7-5	6-0	6-1	5-9	6-1	6-1	
	1936	5-2	5-3	5-2	5-2	6-0	6-1	5-9	6-0	6-6	6-7	6-2	6-5	6-5	8-1	6-8	7-3	7-1	8-0	5-0	7-0	7-1	6-2	6-1	5-9	
	1944	5-2	4-7	4-4	4-7	5-8	5-5	6-2	5-8	5-4	6-3	6-4	6-4	6-4	5-5	7-1	6-0	6-3	—	8-0	8-4	8-3	5-5	5-9	6-1	5-9
	1951	5-3	5-6	6-1	5-7	6-0	5-4	5-4	5-5	5-0	6-3	6-1	6-2	6-2	6-5	6-6	6-4	6-5	—	7-5	7-8	7-7	5-8	5-9	6-1	6-0
	1956	5-2	5-4	2-7	5-0	6-8	5-3	5-9	5-7	5-7	3-8	4-6	5-7	4-9	6-3	8-2	7-2	7-6	8-5	5-3	6-0	6-5	6-0	5-8	6-1	5-9
1961	6-5	4-0	—	5-0	4-8	5-2	4-7	4-9	4-9	4-8	5-5	5-6	5-4	8-5	6-8	6-1	6-7	4-0	4-2	6-0	5-0	5-5	5-7	5-4	5-5	
1966	6-0	—	—	6-0	5-2	—	5-7	5-3	5-2	5-2	—	5-7	5-2	5-1	5-4	6-3	6-0	6-7	6-7	7-5	7-5	5-5	5-7	5-4	5-8	
For Mentally Handicapped	1912	Not available	Not available	Not available	5-2	Not available	Not available	Not available	5-6	Not available	Not available	Not available	7-2	Not available	Not available	Not available	7-1	Not available	Not available	Not available	8-0	Not available	Not available	Not available	5-8	
	1924	—	5-2	5-5	5-3	7-0	6-6	6-3	6-4	—	6-8	7-2	7-1	7-2	—	—	—	7-1	—	8-0	8-0	6-7	6-2	6-3	6-3	
	1931	4-0	5-6	5-3	5-4	—	6-2	5-8	6-0	6-1	6-2	6-9	7-0	6-4	—	6-4	7-0	6-7	7-0	6-5	6-7	6-2	6-0	6-0	6-0	
	1936	—	5-9	5-0	5-6	—	6-1	5-0	6-0	—	6-2	6-0	6-2	6-2	—	7-5	8-0	7-8	—	7-5	8-0	7-8	6-0	6-0	6-0	
	1944	—	1-7	4-8	4-7	—	6-3	5-8	5-7	5-9	6-3	6-3	6-1	6-6	8-0	7-1	6-1	6-6	11-5	7-3	7-8	8-7	5-8	5-8	5-1	
	1951	3-5	5-6	5-8	5-7	5-5	6-2	6-2	6-2	6-2	5-2	6-6	6-3	6-1	6-0	7-8	6-9	7-1	8-0	8-5	7-8	7-9	5-2	6-5	6-4	
	1956	4-5	5-1	5-5	5-2	6-7	6-1	5-9	6-0	6-0	4-3	5-7	5-7	5-7	5-8	7-2	6-9	7-0	6-0	7-7	8-1	7-9	5-4	6-2	6-2	
1961	5-0	5-1	4-9	5-1	5-5	5-7	5-6	5-6	5-6	5-1	5-6	5-8	5-7	6-3	7-0	6-7	6-8	13-0	8-0	7-2	7-6	5-8	6-2	6-1	6-1	
1966	—	—	5-0	5-0	4-8	4-8	5-5	5-5	5-5	5-5	—	5-9	5-8	6-3	6-3	6-7	6-6	—	—	8-1	8-1	5-1	6-2	6-1	6-3	
All School and Classes	1912	Not available	Not available	Not available	4-3	Not available	Not available	Not available	6-2	Not available	Not available	Not available	7-0	Not available	Not available	Not available	6-5	Not available	Not available	Not available	6-6	Not available	Not available	Not available	6-2	
	1924	5-0	5-0	5-1	5-1	5-9	6-1	6-6	6-8	6-0	6-2	6-8	6-2	6-2	6-3	6-4	6-7	6-3	6-4	6-5	7-0	6-6	6-0	6-4	5-9	
	1931	5-1	5-4	5-1	5-2	5-7	5-9	5-9	5-8	5-0	5-0	6-2	6-0	6-0	5-0	6-1	6-5	6-1	5-0	6-1	6-1	6-1	5-9	5-9	5-8	
	1936	4-8	5-1	4-8	4-9	5-5	5-8	5-7	5-7	5-8	5-9	5-9	5-9	6-2	6-1	6-1	6-1	6-3	5-0	6-0	6-1	6-0	5-7	5-8	5-7	
	1944	1-6	3-9	1-8	1-7	5-0	5-1	5-2	5-2	5-4	5-7	5-5	5-5	6-0	6-3	6-1	6-1	6-1	6-1	6-4	6-1	6-1	6-3	5-8	5-8	
	1951	1-8	5-1	5-2	2-0	5-1	5-5	5-4	5-1	5-1	6-3	6-3	6-0	6-1	6-3	6-3	6-0	6-5	6-1	6-1	6-1	6-3	5-1	5-6	5-6	
	1956	1-1	5-1	5-1	1-3	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	5-1	5-6	5-6	
1961	1-7	5-1	1-4	1-3	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	5-1	5-6	5-6		
1966	1-7	5-1	1-4	1-3	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	5-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	6-1	5-1	5-6	5-6		

**SURVEY.—Table B.1.—AVERAGE HEIGHTS AND WEIGHTS OF BOYS IN ORDINARY SCHOOLS
ARRANGED ACCORDING TO HOUSING CONDITIONS—NUMBERS OF BOYS IN 1966 AS IN
TABLE A.1.**

Age	Year	Height in inches						Weight in lbs.					
		Number of Apartments						Number of Apartments					
		1	2	3	4	5 +	All	1	2	3	4	5 +	All
5 years	1906	39.0	39.9	40.7	41.4	42.2	40.1	37.2	38.6	39.5	40.1	41.6	38.7
	1924	40.2	40.3	41.3	41.7	42.7	40.7	38.1	*†37.8	39.9	40.6	41.9	39.1
	1931	40.3	40.7	41.6	42.3	42.7	40.9	38.4	39.1	40.3	41.5	42.1	39.5
	1936	40.9	41.2	41.7	†42.1	†42.6	41.4	39.0	39.7	†40.3	†41.1	42.1	39.9
	1944	41.3	41.7	42.0	42.4	52.7	41.8	40.5	41.1	41.4	42.1	42.2	41.2
	1951	41.6	42.2	42.7	*42.6	43.1	42.3	40.8	41.8	42.4	*42.3	43.0	41.9
	1956	41.8	†42.2	†42.6	*†42.6	43.2	42.4	41.2	41.9	42.5	*42.8	†43.2	42.3
	1961	42.1	42.5	42.8	*42.7	†43.1	42.7	41.7	42.5	42.8	*†42.6	†43.2	42.6
	1966	†42.0	42.6	†42.7	*†42.7	43.2	†42.7	†41.1	†42.3	†42.6	42.7	†43.2	†42.6
9 years	1906	46.5	47.6	48.2	48.9	—	47.7	51.4	53.1	54.8	56.3	—	53.6
	1924	—	—	—	—	—	49.0	—	—	—	—	—	56.1
	1931	48.3	49.0	49.8	50.6	51.0	49.3	55.1	56.6	58.5	60.0	61.5	57.2
	1936	49.0	49.5	50.0	†50.5	†50.8	49.7	56.5	57.4	58.5	†59.6	†61.1	58.0
	1944	50.0	50.6	50.9	51.1	51.4	50.7	59.3	60.7	61.3	61.8	62.7	60.9
	1951	50.6	51.1	51.5	51.6	51.7	51.3	60.5	61.8	62.7	*62.7	63.6	62.2
	1956	†50.6	†51.0	51.6	51.7	52.1	51.5	61.1	62.3	64.0	*64.0	65.0	63.5
	1961	51.0	51.4	51.8	*51.8	52.4	51.8	63.5	63.6	64.5	*†63.9	66.0	64.3
	1966												
13 years	1906	53.4	54.1	55.1	55.8	—	54.5	69.9	72.3	75.3	76.8	—	73.5
	1921	54.1	54.4	55.7	56.5	57.4	†54.5	72.2	73.2	78.1	79.2	85.8	74.9
	1931	55.3	55.7	56.6	57.5	58.0	56.2	77.1	78.2	81.4	84.2	86.8	79.7
	1936	56.1	56.8	57.1	57.9	59.1	57.2	79.2	81.6	83.6	85.7	90.9	82.9
	1944	57.8	58.3	58.7	*58.7	59.3	58.5	87.0	87.8	89.1	*89.0	91.8	88.6
	1951	†57.7	58.7	59.0	59.4	59.5	58.9	†85.2	89.3	90.1	90.2	93.2	89.8
	1956	58.0	†58.7	59.3	*59.8	59.8	59.1	87.9	91.1	92.7	*91.7	94.4	92.0
	1961	59.1	59.5	60.0	*59.9	60.5	59.7	92.1	96.1	96.8	*96.0	97.6	96.5
	1966	†57.0	†59.4	60.1	*60.0	60.7	60.1	†87.3	†95.5	97.3	*96.1	98.9	96.9

* Exceptional averages which contradict the general trend of increase in average measurements with increase in number of apartments.

† Exceptional averages which contradict the general trend of increase in average measurements from year to year.

TABLE A.1.

Age	Year	Height in inches						Weight in lbs.					
		Number of Apartments						Number of Apartments					
		1	2	3	4	5	All	1	2	3	4	5	All
5 years	1906	38.9	39.8	40.2	41.0	42.1	39.9	36.6	37.8	38.0	39.5	39.2	37.8
	1924	39.3	40.1	41.2			40.3	37.3	38.0	38.5			+37.4
	1931	40.0	40.5	41.3	41.9	42.4	40.7	+37.1	+37.8	38.8	40.0	40.9	38.1
	1936	40.6	41.0	+41.3	+41.7	+42.4	41.1	37.5	38.2	+38.8	+39.4	+40.8	38.4
	1944	41.0	41.7	41.7	42.0	42.1	41.4	38.9	39.4	39.8	40.6	*+40.5	39.6
	1951	41.3	41.7	42.3	42.4	42.8	42.0	39.4	40.2	40.8	41.1	41.7	40.5
	1956	41.4	41.8	+42.2	+42.4	+42.7	+42.0	39.6	40.5	41.1	41.4	42.2	40.8
	1961	41.7	42.1	42.4	42.5	43.0	42.6	40.1	41.2	41.3	+41.4	42.4	41.3
	1966	+41.6	42.2	42.5	*+42.4	+43.0	+42.4	+39.7	+41.1	41.5	*+1.5	42.8	41.5
	1906	46.2	46.9	47.7	48.6	50.7	47.2	49.6	51.4	52.8	54.7	54.7	51.9
	1924	—	—	—			47.9	—	—	—			53.3
9 years	1931	48.1	48.8	49.5	50.2	50.7	49.1	53.2	54.5	56.0	57.6	59.3	55.1
	1936	48.6	49.1	49.7	+50.1	50.8	49.4	54.2	55.3	56.4	+57.3	60.3	55.9
	1944	49.7	50.2	50.5	50.6	+50.8	50.3	57.4	58.5	59.3	*58.9	60.8	58.8
	1951	50.0	50.6	51.0	51.1	51.6	50.8	58.8	59.8	60.6	60.9	62.0	60.3
	1956	+50.0	50.7	51.2	*51.2	51.8	51.0	60.2	62.0	62.7	*62.1	63.9	62.3
	1961	50.5	51.1	51.6	*51.5	52.0	51.5	60.5	62.9	64.5	*63.2	65.5	63.8
	1966	—	—	—	—	—	—	—	—	—	—	—	—
	1906	53.9	54.8	55.5	56.4	56.8	55.1	71.9	73.9	76.3	79.3	79.3	75.1
	1924	55.2	*+54.6	56.5	57.3	58.3	56.3	76.3	76.8	80.0	81.6	*80.1	78.2
	1931	56.0	56.8	57.5	58.3	58.8	57.1	79.5	82.0	84.3	87.3	90.0	83.2
	1936	57.4	57.8	58.3	58.7	59.5	58.1	84.9	86.4	88.2	89.6	94.4	87.6
13 years	1944	58.5	58.9	59.2	59.4	60.1	58.8	90.3	92.0	*91.1	93.3	96.5	92.4
	1951	+58.4	+58.9	59.4	*+59.4	+60.1	59.2	91.0	93.0	94.7	*94.4	97.2	94.0
	1956	58.6	59.4	59.8	*59.7	60.3	59.7	92.2	97.4	97.7	*96.6	99.7	97.3
	1961	59.5	59.9	60.2	60.4	60.8	60.3	102.4	102.4	*101.7	*101.7	104.4	102.2
	1966	+58.6	60.0	+60.2	*+60.2	61.0	+60.3	+93.7	+101.4	102.1	+100.7	+104.1	+101.8
	1906	75.1	76.3	76.8	79.3	80.1	75.1	71.9	73.9	76.3	79.3	79.3	75.1
	1924	78.2	79.5	80.0	81.6	82.0	78.2	76.3	76.8	80.0	81.6	*80.1	78.2

* Exceptional averages which contradict the general trend of increase in average measurements with increase in number of apartments.
† Exceptional averages which contradict the general trend of increase in average measurements from year to year.

SURVEY.—Table B.2.—AVERAGE MEASUREMENTS OF 8,629 BOYS OF 5 YEARS OF AGE IN ORDINARY SCHOOLS ARRANGED ACCORDING TO NUMBERS OF APARTMENTS AND OF INMATES.

No. of Inmates per house (Equivalent Adults).	One Apartment.			Two Apartments.			Three Apartments.			Four Apartments.			Five or more Apartments.		
	Children Examined.			Children Examined.			Children Examined.			Children Examined.			Children Examined.		
	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).	No.	Ht. (ins.).	Wt. (lbs.).
1½	14	43.7	44.8	11	44.4	46.9	6	42.7	41.2	3	42.7	42.6	1	42.2	39.2
2	17	42.6	41.4	27	42.5	41.4	8	43.3	43.9	3	44.9	48.9	2	44.0	48.0
2½	31	41.9	41.0	239	43.2	43.2	213	43.4	43.8	58	44.0	45.1	30	44.3	44.4
3	52	42.4	41.8	628	42.9	42.8	575	43.0	43.2	209	43.4	43.7	122	44.3	44.4
3½	41	41.9	40.9	460	42.6	42.4	830	42.7	42.8	254	43.3	43.8	107	43.6	44.5
4	23	41.5	40.9	295	42.5	42.2	528	42.6	42.4	286	43.1	43.3	87	43.5	43.1
4½	17	41.3	38.9	199	42.4	42.3	376	42.8	42.3	356	42.7	42.6	73	43.8	44.4
5	15	41.0	39.4	119	41.8	41.1	229	42.5	42.4	249	42.4	42.5	56	43.2	42.2
5½	4	42.1	44.9	67	42.3	41.1	170	42.6	42.6	245	42.6	42.5	57	42.9	43.2
6	—	—	—	42	42.0	41.0	90	42.1	41.5	193	42.3	41.9	49	42.6	43.6
6½	2	41.5	39.5	28	42.4	41.6	47	41.6	41.5	117	42.2	41.6	37	41.6	41.1
7	1	42.2	38.2	16	42.3	42.4	34	40.7	39.7	86	42.4	42.6	21	42.7	42.4
7½	—	—	—	8	41.1	38.8	27	42.0	41.2	77	42.1	41.2	38	42.5	41.8
8	—	—	—	6	43.4	45.8	23	42.3	40.9	52	41.3	41.2	24	41.9	40.7
8½	1	37.7	33.7	4	41.8	42.5	10	41.7	40.3	24	41.8	39.8	31	42.4	41.6
9	—	—	—	—	—	—	8	42.2	41.8	27	41.5	40.1	16	42.2	40.7
9½	—	—	—	2	40.5	39.5	1	41.7	43.2	14	42.2	42.7	12	42.7	44.3
10+	1	40.2	37.7	2	40.3	37.3	5	42.2	41.2	24	41.7	41.1	40	42.0	41.4
Total	219	42.0	41.1	2,153	42.6	42.4	3,180	42.7	42.6	2,274	42.7	42.7	803	43.2	43.2

For the purpose of Table C. 2, the groups above the heavy lines are regarded as not overcrowded, those within the lines as moderately overcrowded, and those below the line as much overcrowded.

N.B.

SURVEY.—Table C.1.—NUMBERS AND PERCENTAGES OF CHILDREN IN ORDINARY SCHOOLS (SEE TABLE A.1.) PLACED IN VARIOUS MEDICAL ("REMEDIABILITY") CLASSES ARRANGED ACCORDING TO NUMBERS OF APARTMENTS IN THEIR HOUSES.

Age	Number of Apartments		One		Two		Three		Four		Five or more		MEDICAL CLASSIFICATION
			No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	
5 years	Non-Transferred	Class III	45	17.2	411	15.7	627	16.5	406	15.0	162	14.2	Class I.—Free from defect or having defects of clothing cleanliness and/or minor defects of teeth only.
		Class IV, V	59	22.5	509	19.5	692	18.2	426	15.8	150	13.1	
		Class III	31	18.0	286	18.6	433	17.4	285	16.6	68	12.5	
		Class IV, V	37	21.5	314	20.4	491	19.8	231	13.5	97	17.8	
13 years	Non-Transferred	Class III	76	17.5	697	16.8	1,060	16.9	691	15.7	230	13.6	Class II.—Having one or more minor defects of vision and/or defects of teeth requiring treatment.
		Class IV, V	96	22.1	823	19.8	1,183	18.8	657	14.9	247	14.6	
		Class III	4	6.9	106	12.2	301	10.0	273	9.4	126	8.3	
		Class IV, V	7	12.1	108	12.5	318	10.6	260	9.0	172	11.3	
	Non-Transferred	Class III	3	11.5	53	12.0	202	13.1	177	10.3	63	9.2	Class III.—Having one or more ailments other than above from which complete recovery is anticipated in a few weeks ('temporary' defects).
		Class IV, V	2	7.7	59	13.4	204	13.2	182	10.6	75	11.0	
		Class III	7	8.3	159	12.2	503	11.0	450	9.7	189	8.6	
		Class IV, V	9	10.7	167	12.8	522	11.5	442	9.6	247	11.2	
All ages	Non-Transferred	Class III	49	15.3	517	14.9	928	13.6	679	12.1	228	10.8	Class I.—Having defects from which improvement is not considered possible.
		Class IV, V	66	20.6	617	17.7	1,010	14.8	686	12.2	322	12.1	
		Class III	34	17.2	339	17.2	635	15.8	462	13.4	131	10.7	
		Class IV, V	39	19.7	373	18.8	695	17.2	413	12.0	172	14.0	
Total	Non-Transferred	Class III	84	16.6	856	15.7	1,563	14.4	1,111	12.6	419	10.8	Note.—Percentages for Classes I and II are not given as they are the balance of 100 per cent after deducting the
		Class IV, V	105	20.5	1,001	19.1	1,470	15.7	1,000	13.5	337	10.5	

STATISTICAL APPENDIX.

TABLE I—TOTAL NUMBER OF CHILDREN EXAMINED.

(a) SYSTEMATIC EXAMINATIONS.

Nursery	...	...	...	...	...	...	1,784
Entrants	...	...	...	...	...	...	14,517
13-year-olds	...	...	...	...	...	...	13,051
16-year-olds	...	...	...	...	...	...	2,770
Others	...	...	...	...	...	...	953
Special Schools and Classes—							
physically handicapped	...	...	...	...	...	...	120
mentally handicapped	...	...	...	...	...	...	378

(b) OTHER EXAMINATIONS.

Nursery (special and re-inspection cases)	...	...	2,845
Vision testing (9-year-olds)	...	...	7,747
Vision testing (Keystone apparatus)	...	...	11,333
Special Cases (non-routines)	...	...	26,570
Re-inspections (cases "at risk")	...	...	15,690
Leaving Interviews	...	...	7,678
Examinations regarding mental defect	...	...	2,148
Discharges in Special Schools and Classes	...	...	103
Audiometric Survey (by audiometricians)	...	...	22,798
Applicants for Licences under Byelaws	...	...	390
Adult Employees of Corporation	...	...	2,012
Holidays Abroad, Educational Excursions, Camps	...	...	16,931
Residential School Examinations	...	...	6,624
Pre-Vocational Students	...	...	1,121
Remand Home Examinations	...	...	3,305
Cleanliness Inspections (by nurses)	...	...	169,789

TABLE II—AVERAGE MEASUREMENTS OF SCHOOL CHILDREN DURING YEAR ENDED 31st DECEMBER, 1965.

			Boys		Girls	
			Height	Weight	Height	Weight
			(ins.)	(lbs.)	(ins.)	(lbs.)
5 years 4 months						
Number examined	...	...	7,284		6,544	
Average measurements	...	...	42.60	42.42	42.32	41.31
13 years 5 months						
Number examined	...	...	5,509		5,625	
Average measurements	...	...	59.95	96.97	60.02	101.87
16 years						
Average age (in months beyond year of age)	...	...	6.00		6.19	
Number examined	...	...	1,086		899	
Average measurements	...	...	67.63	135.93	63.59	122.84

4. SKIN	(a) Head	Ringworm ...	4 (0.1)	—	—	—	—	—	—	4 (0.03)	—	4 (0.01)
		Impetigo ...	7 (0.1)	7 (0.1)	3 (0.1)	—	—	—	9 (0.1)	11 (0.1)	20 (0.1)	
		Injuries ...	9 (0.1)	10 (0.1)	—	—	—	—	10 (0.1)	11 (0.1)	21 (0.1)	
		Others ...	31 (0.4)	27 (0.4)	81 (1.2)	37 (2.7)	29 (2.1)	—	109 (0.7)	139 (0.9)	248 (0.8)	
	(b) Body	Ringworm ...	—	—	1 (0.02)	—	—	—	1 (0.01)	—	1 (0.003)	
		Impetigo ...	7 (0.1)	5 (0.1)	4 (0.1)	1 (0.02)	—	—	11 (0.1)	6 (0.04)	17 (0.1)	
		Scabies ...	8 (0.1)	11 (0.2)	10 (0.2)	4 (0.1)	—	—	19 (0.1)	16 (0.1)	35 (0.1)	
		Injuries ...	17 (0.2)	6 (0.1)	5 (0.1)	7 (0.1)	1 (0.1)	—	24 (0.2)	14 (0.1)	38 (0.1)	
		Others ...	225 (2.9)	163 (2.4)	169 (2.6)	197 (3.0)	80 (5.7)	66 (4.8)	491 (3.1)	439 (2.9)	930 (3.0)	
		Totals ...	308 (4.0)	229 (3.3)	228 (3.5)	293 (4.4)	118 (3.5)	96 (7.0)	678 (4.2)	636 (4.2)	1,314 (4.2)	
5. NUTRITION	{ Slightly defective Bad ... }	...	103 (1.3)	135 (2.0)	63 (1.0)	53 (0.8)	—	173 (1.1)	192 (1.3)	365 (1.2)		
		...	3 (0.01)	6 (0.1)	3 (0.1)	1 (0.02)	1 (0.1)	—	7 (0.04)	7 (0.1)	14 (0.04)	
6. MOUTH AND TEETH UNHEALTHY	Totals ...	...	106 (1.4)	141 (2.1)	66 (1.0)	54 (0.8)	1 (0.1)	180 (1.1)	199 (1.3)	379 (1.2)		
		...	71 (0.9)	55 (0.8)	41 (0.6)	39 (0.6)	7 (0.5)	2 (0.1)	97 (0.6)	218 (0.7)		

TABLE IIa—Continued

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
7. NASO PHARYNX								
(a) <i>Nose</i>								
Obstruction—for observation	38 (0.5)	37 (0.5)	13 (0.2)	8 (0.1)	1 (0.1)	—	54 (0.3)	46 (0.3)
Obstruction for operation	18 (0.2)	14 (0.2)	3 (0.1)	6 (0.1)	—	—	22 (0.1)	20 (0.1)
Catarrh	87 (1.1)	48 (0.7)	20 (0.3)	17 (0.3)	6 (0.4)	—	114 (0.7)	67 (0.4)
Other conditions	14 (0.2)	9 (0.1)	18 (0.3)	18 (0.3)	2 (0.1)	1 (0.1)	35 (0.2)	28 (0.2)
(b) <i>Throat</i>								
Tonsils—for observation	456 (6.0)	426 (6.2)	70 (1.1)	103 (1.6)	4 (0.3)	6 (0.4)	537 (3.4)	547 (3.6)
Tonsils—for operation	158 (2.1)	114 (1.7)	12 (0.2)	18 (0.3)	—	—	171 (1.1)	132 (0.9)
Other conditions	10 (0.1)	4 (0.1)	3 (0.1)	4 (0.1)	3 (0.2)	—	17 (0.1)	9 (0.1)
(c) <i>Glands</i>								
For observation	104 (1.4)	85 (1.2)	20 (0.3)	12 (0.2)	1 (0.1)	1 (0.1)	132 (0.8)	100 (0.7)
For operation	—	2 (0.03)	—	—	—	—	—	2 (0.01)
Totals	885 (11.6)	739 (10.7)	159 (2.5)	186 (2.8)	17 (1.2)	8 (0.6)	1,082 (6.8)	951 (6.2)
8. EYES								
(a) <i>External Diseases</i>								
Blepharitis	54 (0.7)	34 (0.5)	64 (1.0)	73 (1.1)	4 (0.3)	5 (0.1)	125 (0.8)	116 (0.8)
Conjunctivitis	6 (0.1)	—	2 (0.03)	4 (0.1)	1 (0.1)	1 (0.1)	9 (0.1)	5 (0.03)
Corneal opacities	—	—	3 (0.1)	—	1 (0.1)	—	4 (0.03)	4 (0.01)
Strabismus	244 (3.2)	253 (3.7)	71 (1.1)	82 (1.2)	7 (0.5)	7 (0.5)	332 (2.1)	345 (2.3)
Other diseases	20 (0.3)	13 (0.2)	12 (0.2)	15 (0.2)	1 (0.1)	—	36 (0.2)	29 (0.2)
Totals	321 (4.1)	300 (4.1)	152 (2.1)	171 (2.6)	14 (0.1)	13 (0.1)	506 (3.3)	495 (3.3)

8. EYES										
<i>(b) Visual acuity (Snellen)*</i>										
Fair, 6/9 or 6/12	...	265 (3.5)	274 (4.0)	470 (7.3)	539 (8.1)	117 (8.4)	130 (9.4)	900 (5.7)	968 (6.4)	1,868 (6.0)
Bad, 6/18 or worse	...	19 (0.3)	16 (0.2)	181 (2.8)	228 (3.4)	23 (1.7)	36 (2.6)	236 (1.5)	291 (1.9)	527 (1.7)
Totals	...	284 (3.8)	290 (4.3)	651 (10.1)	767 (11.6)	140 (10.1)	166 (12.0)	1,136 (7.2)	1,259 (8.3)	2,395 (7.7)
Recommended for Refraction										
Recommended for Re-test	...	141 (1.3)	129 (1.9)	266 (4.1)	243 (3.7)	36 (2.6)	38 (2.8)	464 (2.9)	428 (2.8)	892 (2.9)
Totals	...	34 (0.4)	45 (0.7)	67 (1.0)	75 (1.1)	16 (1.1)	16 (1.2)	121 (0.8)	139 (0.9)	260 (0.8)
<i>(c) Colour vision abnormality</i>										
Totals	...	175 (2.3)	174 (2.5)	333 (5.2)	318 (4.8)	52 (3.7)	54 (3.9)	585 (3.7)	567 (3.7)	1,152 (3.7)
<i>(b) Defective hearing</i>										
Grade I—For ordinary class	...	85 (1.1)	10 (0.1)	224 (3.5)	5 (0.1)	36 (2.6)	4 (0.3)	394 (2.5)	21 (0.1)	415 (1.3)
IIa—for front seat	...	46 (0.6)	34 (0.5)	30 (0.5)	30 (0.5)	5 (0.4)	—	83 (0.5)	64 (0.4)	147 (0.5)
IIb—for class for semi-deaf	...	16 (0.2)	11 (0.2)	10 (0.2)	15 (0.2)	3 (0.2)	2 (0.1)	29 (0.2)	28 (0.2)	57 (0.2)
III—for Deaf class	...	33 (0.4)	27 (0.4)	20 (0.3)	15 (0.2)	2 (0.1)	3 (0.2)	57 (0.4)	45 (0.3)	102 (0.3)
Totals	...	7 (0.1)	6 (0.1)	10 (0.2)	8 (0.1)	—	—	18 (0.1)	14 (0.1)	32 (0.1)
Totals	...	1 (0.01)	—	—	1 (0.02)	—	—	1 (0.01)	1 (0.01)	2 (0.01)
Totals	...	103 (1.3)	78 (1.1)	70 (1.1)	69 (1.0)	10 (0.7)	5 (0.4)	188 (1.2)	152 (1.0)	340 (1.1)

* The record of defective vision applies to the better eye and is *with spectacles if worn at examination*. Entrants were examined by the "E" test and other age-groups by the Snellen test. The percentages relate to 31,092 children—199 cases fewer than the total number seen at routine medical inspection.

TABLE IIa—Continued

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
10. SPEECH								
Defective articulation ...	179 (2.3)	74 (1.1)	19 (0.3)	1 (0.02)	—	1 (0.1)	201 (1.3)	77 (0.5)
Stammering ...	6 (0.1)	3 (0.04)	18 (0.3)	3 (0.1)	4 (0.3)	—	28 (0.2)	6 (0.04)
Totals ...	185 (2.4)	77 (1.1)	37 (0.6)	4 (0.1)	4 (0.3)	1 (0.1)	229 (1.4)	83 (0.5)
11. MENTAL AND NERVOUS CONDITION								
Backward ...	14 (0.2)	5 (0.1)	1 (0.02)	1 (0.02)	—	—	17 (0.1)	8 (0.1)
Dull ...	5 (0.1)	2 (0.03)	1 (0.02)	1 (0.02)	—	—	6 (0.04)	3 (0.02)
Mentally handicapped (educable) ...	—	1 (0.01)	—	—	—	—	—	1 (0.01)
" " (ineducable)	—	—	—	—	—	—	—	—
Highly nervous ...	44 (0.6)	28 (0.4)	22 (0.3)	15 (0.2)	1 (0.1)	—	69 (0.4)	49 (0.3)
Difficult in behaviour ...	30 (0.4)	25 (0.4)	2 (0.03)	1 (0.02)	—	—	35 (0.2)	26 (0.2)
Epilepsy (Mild) ...	15 (0.2)	9 (0.1)	8 (0.1)	11 (0.2)	1 (0.1)	5 (0.4)	25 (0.2)	28 (0.2)
" (Severe) ...	2 (0.03)	—	3 (0.1)	—	—	—	5 (0.03)	—
Totals ...	110 (1.4)	70 (1.0)	37 (0.6)	29 (0.4)	2 (0.1)	5 (0.1)	157 (1.0)	115 (0.8)
12. CIRCULATORY SYSTEM								
(a) Organic Heart Disease								
Congenital ...	27 (0.4)	19 (0.3)	11 (0.2)	19 (0.3)	—	1 (0.1)	41 (0.3)	40 (0.3)
Acquired ...	2 (0.03)	2 (0.03)	10 (0.2)	6 (0.1)	2 (0.1)	1 (0.1)	14 (0.1)	10 (0.1)
(b) Functional Conditions	162 (2.1)	123 (1.8)	37 (0.6)	35 (0.5)	8 (0.6)	10 (0.7)	213 (1.3)	169 (1.1)
Totals ...	191 (2.5)	141 (2.1)	58 (0.9)	60 (0.8)	10 (0.6)	12 (0.7)	268 (1.7)	219 (1.4)

13. LUNGS											
Chronic Bronchitis	...	...	20 (0.3)	11 (0.2)	10 (0.2)	8 (0.1)	—	—	33 (0.2)	20 (0.1)	53 (0.2)
Suspected Tuberculosis	...	...	—	2 (0.03)	4 (0.1)	9 (0.1)	—	—	4 (0.03)	11 (0.1)	15 (0.1)
Catarrh	...	...	248 (3.2)	204 (3.0)	75 (1.2)	53 (0.8)	4 (0.3)	6 (0.4)	337 (2.1)	267 (1.7)	604 (1.9)
Other diseases	...	...	33 (0.4)	31 (0.5)	20 (0.3)	22 (0.3)	2 (0.1)	1 (0.1)	55 (0.3)	56 (0.4)	111 (0.4)
Totals	...	...	301 (3.9)	248 (3.6)	109 (1.7)	92 (1.4)	6 (0.4)	7 (0.5)	429 (2.7)	354 (2.3)	783 (2.5)
14. DEFORMITIES											
(a) Congenital	...	...	81 (1.1)	39 (0.6)	39 (0.6)	34 (0.5)	3 (0.2)	7 (0.5)	134 (0.8)	82 (0.5)	216 (0.7)
(b) Acquired	...	...	5 (0.1)	1 (0.01)	9 (0.1)	5 (0.1)	1 (0.1)	3 (0.2)	17 (0.1)	9 (0.1)	26 (0.1)
Infantile Paralysis	...	...	12 (0.2)	15 (0.2)	7 (0.1)	—	1 (0.1)	—	21 (0.1)	15 (0.1)	36 (0.1)
Probable Rickets	...	...	5 (0.1)	3 (0.04)	4 (0.1)	1 (0.02)	1 (0.1)	1 (0.1)	10 (0.1)	5 (0.03)	15 (0.1)
Cerebral Palsy	...	...	212 (2.8)	167 (2.4)	165 (2.6)	159 (2.4)	32 (2.3)	30 (2.2)	428 (2.7)	362 (2.4)	790 (2.5)
Other causes	...	...	315 (4.1)	225 (3.3)	224 (3.5)	199 (3.0)	38 (2.7)	41 (3.0)	610 (3.8)	473 (3.1)	1,083 (3.5)
Totals	...	...	2 (0.03)	1 (0.01)	1 (0.02)	—	—	—	3 (0.02)	1 (0.01)	4 (0.01)
15. INFECTIOUS DISEASES											
16. ASTHMA	...	...	50 (0.7)	20 (0.3)	53 (0.8)	18 (0.3)	2 (0.1)	3 (0.2)	108 (0.7)	42 (0.3)	150 (0.5)
17. DIABETES	...	...	1 (0.01)	—	5 (0.1)	4 (0.1)	—	3 (0.2)	7 (0.04)	8 (0.1)	15 (0.1)
18. OTHER DISEASES OR DEFECTS											
...	...	...	337 (4.4)	330 (4.8)	217 (3.4)	277 (4.2)	33 (2.4)	64 (4.6)	607 (3.8)	692 (4.5)	1,299 (4.2)

TABLE IIb—ADDITIONAL INFORMATION REGARDING RESULTS OF SYSTEMATIC EXAMINATIONS.

Except in respect of the dual information regarding children who wore glasses, no child appears more than once in each section.
 "Sections" are indicated by horizontal lines across the columns.

Age Groups	Entrants		13-year-olds		16-year-olds		All ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Parents present at examination	7,137 (93.4)	6,330 (92.1)	696 (10.8)	1,023 (15.5)	22 (1.6)	37 (2.7)	8,072 (50.5)	7,563 (49.4)
Children notified to parent as requiring treatment :—								
(a) Defects of clothing and/or cleanliness	695 (9.1)	636 (9.3)	124 (1.9)	134 (2.0)	5 (0.4)	10 (0.7)	841 (5.3)	800 (5.2)
minor dental defect	360 (4.7)	326 (4.7)	126 (2.0)	302 (4.6)	6 (0.4)	7 (0.5)	501 (3.1)	659 (4.3)
Verbally printed notice.	1,314 (17.2)	986 (14.3)	677 (10.5)	596 (9.0)	98 (7.0)	134 (9.7)	2,151 (13.5)	1,756 (11.5)
(b) Other defects	791 (10.4)	756 (11.0)	541 (8.4)	586 (8.9)	72 (5.2)	87 (6.3)	1,444 (9.0)	1,472 (9.6)
Children noted for re-inspection :—								
(a) Defects of clothing, etc. (as above)	969 (12.7)	888 (12.9)	248 (3.9)	452 (6.8)	18 (1.3)	22 (1.6)	1,266 (7.9)	1,414 (9.2)
(b) Other defects	1,811 (23.7)	1,406 (20.5)	1,069 (16.6)	1,209 (18.3)	185 (13.3)	193 (14.0)	3,169 (19.8)	2,874 (18.8)
Children excluded from attendance at school	9 (0.1)	11 (0.2)	3 (0.1)	9 (0.1)	—	—	13 (0.1)	20 (0.1)
Children "free from defects" in terms of Table III :—								
(a) No recorded defect	3,164 (41.1)	2,876 (41.8)	4,417 (68.7)	4,140 (62.5)	1,032 (7.1)	982 (7.3)	8,893 (55.7)	8,250 (53.8)
(b) Defects of clothing only	2 (0.03)	4 (0.1)	13 (0.2)	8 (0.1)	1 (0.1)	—	16 (0.1)	13 (0.1)
(c) Defects of cleanliness only	104 (1.4)	219 (3.2)	195 (3.0)	531 (8.0)	—	11 (0.8)	305 (1.9)	793 (5.2)
(d) Minor dental defect with or without clothing and/or cleanliness defect(s)	1,522 (19.9)	1,370 (19.9)	47 (0.7)	54 (0.8)	11 (0.8)	3 (0.2)	1,620 (10.3)	1,469 (9.8)
Totals	15,635 (50.0)	15,635 (50.0)						

TABLE III—SYSTEMATIC MEDICAL EXAMINATION OF
ACCORDING TO REMEDIABILITY OF THE MAJOR

CLASSIFICATION	NO. OF CHILDREN EACH GROUP (AND		
	Entrants		
	Boys	Girls	Total
I. Children free from defects	4,792 (62.7)	4,469 (65.9)	9,261 (63.8)
II. Children (otherwise free from defects) who suffer from—			
(a) Defective vision not worse than 6/12 in the better eye with or without glasses; or	151 (2.0)	144 (2.1)	295 (2.0)
(b) Oral Sepsis	66 (0.9)	46 (0.7)	112 (0.8)
(c) Both (a) and (b)	1 (0.01)	1 (0.01)	2 (0.01)
Totals	218 (2.9)	191 (2.8)	409 (2.8)
III. Children suffering from ailments (other than those mentioned in II) from which complete recovery is anticipated within a few weeks ...	1,224 (16.0)	1,147 (16.7)	2,371 (16.3)
IV. Children suffering from (or suspected to be suffering from) defects less remediable than defects specified in II or III, distinguishing cases—			
(a) Where complete cure or restora- tion of function (in the case of eye defect, full correction) is considered possible	956 (12.5)	749 (10.9)	1,705 (11.7)
(b) Where improvement only is considered possible, <i>e.g.</i> , without complete restoration of function	440 (5.8)	311 (4.5)	751 (5.2)
Totals	1,396 (18.3)	1,060 (15.4)	2,456 (17.0)
V. Children suffering from defects from which improvement is not considered possible	12 (0.2)	8 (0.1)	20 (0.1)
Total numbers of children examined ...	7,642	6,875	14,517

• Includes 953 children

CHILDREN IN ORDINARY SCHOOLS. CLASSIFICATION DEFECTS FOUND IN THE INDIVIDUAL CHILD.

EXAMINED IN PERCENTAGES).						No. OF CHILDREN EXAMINED (AND PERCENTAGES).		
13-year-olds			16-year-olds			*All ages Totals		
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
4,672 (72.7)	4,733 (71.5)	9,405 (72.1)	1,044 (75.0)	996 (72.3)	2,040 (73.7)	10,834 (67.8)	10,525 (68.7)	21,359 (68.3)
353 (5.5)	407 (6.1)	760 (5.9)	90 (6.5)	104 (7.5)	194 (7.0)	628 (3.9)	674 (1.4)	1,302 (1.2)
35 (0.5)	34 (0.5)	69 (0.5)	6 (0.1)	1 (0.1)	7 (0.3)	109 (0.7)	82 (0.5)	191 (0.6)
4 (0.1)	1 (0.02)	5 (0.04)	—	—	—	5 (0.03)	2 (0.01)	7 (0.02)
392 (6.1)	442 (6.7)	834 (6.4)	96 (6.9)	105 (7.6)	201 (7.3)	742 (4.6)	758 (4.9)	1,500 (4.8)
635 (9.9)	721 (10.9)	1,356 (10.4)	143 (10.3)	135 (9.8)	278 (10.0)	2,065 (12.9)	2,053 (13.4)	4,118 (13.2)
387 (6.0)	426 (6.4)	813 (6.2)	63 (4.5)	85 (6.2)	148 (5.3)	1,454 (9.1)	1,298 (8.5)	2,752 (8.8)
334 (5.2)	284 (4.3)	618 (4.7)	44 (3.2)	55 (4.0)	99 (3.6)	848 (5.3)	662 (4.3)	1,510 (4.8)
721 (11.2)	710 (10.7)	1,431 (10.9)	107 (7.7)	140 (10.2)	247 (8.9)	2,302 (14.1)	1,960 (12.8)	4,262 (13.6)
10 (0.2)	15 (0.2)	25 (0.2)	2 (0.1)	2 (0.1)	4 (0.1)	27 (0.2)	25 (0.2)	25 (0.2)
6,430	6,621	13,051	1,392	1,378	2,770	15,970	15,321	31,291

outwith normal Age Groups.

TABLE IV—SOCIAL GROUP AND MEDICAL REMEDIABILITY CLASS.

By analysing the information obtained at systematic medical inspection it is possible to show the comparative health conditions of children belonging to each of the so-called Social Groups. In the following table, therefore, the occupations of the parents have been arranged in five groups and related to the medical remediability classifications of Table III.

Numbers and Percentages of Children in Ordinary Schools Placed in Various Medical ("Remediability") Classes arranged according to Social Group of Parent.

Social Group of Parent	1		2		3		4		5		Totals	
	Professional		Clerical		Skilled		Semi-skilled		Labouring		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%		
I. Children free from defects (other than clothing, cleanliness or minor dental defects)	406	69.5	2,836	72.2	6,194	70.2	7,907	68.4	4,016	62.8	21,359	68.2
II. Children suffering only from slightly defective vision and/or oral sepsis	41	7.0	191	4.9	390	4.4	551	4.7	327	5.1	1,500	4.8
III. Children suffering from temporary defects (other than in II) ...	60	10.3	420	10.7	1,116	12.7	1,465	12.7	1,057	16.5	4,118	13.2
IV. Children suffering from curable or improvable defects	76	13.0	474	12.1	1,107	12.5	1,628	14.1	977	15.3	4,262	13.6
V. Children suffering from defects not considered improvable	1	0.2	6	0.1	15	0.2	12	0.1	18	0.3	52	0.2
Total Numbers of Children Examined	584	100.0	3,927	100.0	8,822	100.0	11,563	100.0	6,395	100.0	31,291	100.0

Perusal of the statistics in the table reveals the following :—

- (1) The percentage of children free from defects (Class I) was greatest for Social Group 2 (Clerical) and diminished progressively for each of the remaining groups. Social Group 1 was the exception to the normal.
- (2) Percentages in Class III increased more or less consistently from Social Groups 1 to 5, less so in Class IV.

TABLE V—SUMMARISED TREATMENT STATISTICS.

							Cases	Attendances
EAR—								
Examined only	...	...	...	...			430	13,771
Clinic treatment	...	...	...	...			1,821	
Aurists' Examinations	...	...	...	...			1,391	2,031
Aurists' Classifications	...	...	...	...			23	23
Audiometric Survey	...	...	...	...			1,254	2,138
EYE							1,317	8,477
SKIN—								
Clinic treatment	...	...	...	...			12,199	110,991
Cleansing clinics	...	...	...	...			713	1,723
Scabies baths	...	...	...	...			722	2,891
DEFECTIVE VISION—								
Clinic treatment	...	...	...	...			10,029	10,029
Spectacles supplied	...	...	...	...			4,690	5,719
EAR, NOSE AND THROAT—								
Aurists' Examinations	...	...	...	...			125	190
Tonsil/Adenoid operations	...	...	...	...			455	1,423
ORTHOPAEDIC—								
Examined only	...	...	...	...			2,034	2,034
Treated by exercises	...	...	...	...			1,133	14,243
Treated in Spastic Unit	...	...	...	...			42	5,678
OTHER DISEASES—								
General	...	...	...	...			7,419	19,124
Supply of medicines	...	...	...	...			4,198	12,304
Artificial Light	...	...	...	...			430	6,882
Cardiac cases	...	...	...	...			128	317

DENTAL—						Cases	Attendances
Ordinary	...	...	...	...	...	18,439	59,835
Orthodontic	...	...	...	...	...	187	4 695
REMAND HOMES	...	...	...	...	...	555	555
DEFECTIVE SPEECH	...	...	...	...	...	2,450	27,823
OCCUPATIONAL THERAPY	...	...	...	...	...	11	2 829

TABLE VI—DENTAL INSPECTION AND TREATMENT.

(1) GENERAL STATISTICS.

Number of Children seen at Routine Dental Inspection								Special and Emer- gency Cases
Age in years	Number Inspected	With Dental Defects	Offered Treat- ment	Accept- ing Treat- ment	Treated	Made Dentally fit	Number Treated	
3 or under	...	4	2	2	1	89	37	97
4 ...	...	31	21	20	4	92	49	168
Totals 0-4 years	...	35	23	22	5	181	86	265
5 ...	...	5,075	3,857	3,764	1,594	1,317	493	428
6 ...	...	5,882	4,761	4,638	2,101	2,017	915	460
7 ...	...	5,654	4,716	4,592	2,088	1,980	981	417
8 ...	...	5,714	4,725	4,580	1,907	2,011	1,088	484
9 ...	...	5,603	4,495	4,338	1,673	1,877	1,161	461
10 ...	...	5,315	4,042	3,885	1,435	1,660	1,099	367
11 ...	...	4,780	3,511	3,362	1,274	1,450	984	368
12 ...	...	1,561	1,115	1,042	357	987	788	312
13 ...	...	65	49	49	46	546	476	286
14 ...	...	127	79	79	78	436	421	270
15 ...	...	86	47	47	43	154	145	78
16 ...	...	6	5	5	5	32	41	17
17 or over	...	—	—	—	1	18	16	6
Total 5-17 + years	39,868	31,402	30,381	12,602	*14,485	8,608	3,954	

No of attendances (including orthodontic) for treatment ; 0- 4 years, 854 ;
 5-17 years 58,981 ;
 Total, 59,835.

* Includes 1,423 treated by Dental Auxiliaries.

(2) DETAILS OF TREATMENT.

				Routine	Emergency	Total.
Fillings—permanent teeth	...	...	...	25,930	121	26,051
—deciduous teeth	...	...	...	7,373	78	7,451
Extractions (not including orthodontic)—						
—permanent teeth	...	...	...	2,932	770	3,702
—deciduous teeth	...	...	...	11,124	1,959	13,083
Administration of General Anaesthetic	...	...	...	1,186	18	1,204
Other operations—permanent teeth	...	...	...	14,844	1,212	16,056
—deciduous teeth	...	...	...	7,078	611	7,689
Dentures	...	...	...	—	—	162
Repairs to dentures	...	...	...	—	—	16
Radiographs—number of exposures						
(not including orthodontic)	...	...	...			
intra-oral	...	...	...	—	—	310
extra-oral	...	...	...	—	—	5
Number of treatment sessions (including						
Dental Auxiliaries)	...	...	...	—	—	8,004

(3) ORTHODONTIC TREATMENT.

Cases from previous year, 325 ; new cases, 187 ; completed cases, 142 ; discontinued cases, 34 ; cases continuing at end of year, 336 ; attendances for treatment, 4,695 ; number of treatment sessions, 557.

Diagnostic examinations, 205 ; number of removable appliances fitted, 856 ; repairs to appliances, 41 ; radiographs—intra-oral, 73 ; extra-oral 4.

(4) ADDITIONAL INFORMATION.

Fillings of permanent teeth included 26 crowns, 34 gold inlays, 59 root treatments and 4 pulpotomies.

TABLE VII—MORTALITY OF SCHOOL CHILDREN.

*Deaths during Year ended 31st December, 1966,
of Children aged 5-15 years.*

Cause of Death	5-10 years		10-15 years		All Ages		Totals
	Boys	Girls	Boys	Girls	Boys	Girls	
Violence—							
Road Traffic Accidents ...	4	—	2	2	6	2	8
Other violent causes ...	13	6	4	2	17	8	25
Tubercular Meningitis ...	—	1	—	—	—	1	1
Meningococcal Septicaemia ...	1	—	—	—	1	—	1
Measles, Bronco-Pneumonia ...	1	—	—	—	1	—	1
Infective Hepatitis ...	—	—	—	1	—	1	1
Malignant Neoplasms ...	4	3	2	1	6	4	10
Benign and Unspecified Neoplasms ...	—	1	—	—	—	1	1
Diabetes Mellitus ...	1	—	—	—	1	—	1
Epilepsy ...	1	—	—	—	1	—	1
Other Diseases of Nervous System—							
Idiopathic internal hydrocephalus ...	—	—	1	—	1	—	1
Encephalitis ...	—	1	—	—	—	1	1
Cerebral anoxia, mental retardation ...	1	—	—	—	1	—	1
Cerebral haemorrhage ...	2	1	1	1	3	2	5
Pneumonia ...	—	2	1	1	1	3	4
Tracheitis and Pulmonary Oedema ...	—	—	—	1	—	1	1
Nephritis and Nephrosis ...	2	—	—	3	2	3	5
Fibrocystic Disease ...	—	—	1	—	1	—	1
Ventricular Fibrillation ...	—	—	—	1	—	1	1
All other diseases—							
Chronic asthma ...	—	1	—	1	—	2	2
Septicaemia peritonitis ...	—	1	—	—	—	1	1
Chronic pyelonephritis, uraemia ...	—	1	—	2	—	3	3
Asphyxia ...	—	—	1	—	1	—	1
Totals ...	30	18	13	16	43	34	77

SECTION V

HEALTH EDUCATION.

Two health education campaigns, both of which required extensive preparation, were launched during the year.

POLIOMYELITIS CAMPAIGN, 1966.

In Glasgow, free of polio since 1963, despite low-intensity drives in 1963, 1964 and 1965, immunisation in the pre-school years deteriorated from an average protection of 66 per cent. in 1962 to 58 per cent. in 1965. These figures reflected very low protection in seventeen Wards of the City, each with a hard core of resistant mothers. In the better residential Wards there was a high level of protection. By 1966, in all districts, 46,745 children were in need of immunisation.

With an increasing at-risk group the Medical Officer of Health was informed by the Professor of Virology at Glasgow University that 1966 could be a polio year from the types of entero-viruses that his department had been isolating.

It was decided, therefore, to launch a massive campaign commencing in March, 1966. It would appeal to all mothers with children in this age group.

It was apparent from the results in 1963 to 1965 that an annual low-intensity drive could not increase the protection rates to the extent required to keep up with the births, particularly in the Wards where immunisation was most needed. More intensive effort was essential through every channel of communication so that the City as a whole would be involved. An atmosphere of urgency was necessary.

THE SURVEY OF 1964.

One week after launching the Spring drive in 1964 a shopping centre survey consisting of 120 interviews was done in four City Wards with low levels of protection.

This low-intensity programme had been presented to the public through Press, posters, leaflets and by loudspeaker van. Of the mothers questioned 59 per cent. were not aware of the campaign. The remaining 41 per cent. had heard about it, and 20 per cent. did not know the address of the local clinic.

The survey also gave an indication of the media from which those who knew about the drive had received their information: Television 40 per cent.; Press 20 per cent.; loudspeaker van 20 per cent.; other means (posters, leaflets, by word of mouth from neighbours, relatives, etc.), 20 per cent. This information proved useful in planning the 1966 campaign.

PLAN OF CAMPAIGN.

It was considered that within the general campaign additional emphasis must be made in the 17 Wards with the lowest levels of protection.

The organisation fell naturally into three phases, each a month apart to coincide with the appropriate dose of vaccine.

1. It was conducted against a background of mass publicity and put the problem of vaccination to the City as a whole reminding mothers of the need for vaccination of their children.
2. Prior to the campaign, medical, health visiting, and sanitary staff were fully informed by the Medical Officer of Health, who received their suggestions.
3. General Practitioners co-operated with the Department.
4. To make it as easy as possible for mothers evening clinics and additional day clinics were arranged.
5. Mobile vaccination units were used in the seventeen Wards.
6. An intensive follow-up post-card and appointments system was brought into operation so that mothers could be reminded at each stage of vaccination.
7. Support was received from the churches, trade unions, industrial and commercial organisations, doctors' surgeries, Corporation departments, individual firms, trade associations, Government departments, the Post Office, hospitals, nationalised industries, sports and recreational organisations, cinemas, bingo halls, the Press and television. Assistance was given in the distribution of posters.
8. A special badge was manufactured to be awarded to children in the seventeen areas who completed the course.
9. Where necessary, vaccine would be taken by health visitors direct to children in their homes.

The Theme :—It was decided to introduce a note of urgency into the propaganda, a theme which could be construed as having an undertone of fear (fear as a motivational force in health education is controversial). Nevertheless it can be said that POLIO is an emotional word, and fear is implicit in any drive against poliomyelitis. It was only fair that mothers should be fully acquainted in the strongest possible way with a disturbing situation, yet simultaneously shown how easily

she could relieve her natural fears by taking her child to doctor or clinic for vaccination.

The following theme was used on posters, Press, advertisements, leaflets, loudspeaker van, cinemas and bingo halls :

URGENT—To all mothers

POLIO PROBABLE THIS YEAR

Have your child protected now.

Motif :—A drawing of a boy with a leg brace appeared on all posters. Psychologically it had the advantage of being used the previous year and to some extent had become known. A drawing of this kind is self-explanatory.

Posters were printed in four kinds from a departmental design by the Corporation's Printing Department. A total print order of 18,000 was distributed by the Department and other organisations.

Sixteen-sheet posters (10ft. by 6ft. 8in.) for the public hoardings in the seventeen Wards were printed by silk screen process. They were designed to be read at a glance and the Gill Sans type-face was selected—straight-forward communication without design frills but with a message.

Advertisements :—There were three sizes of advertisements. The first to appear carried a signed statement by the Medical Officer of Health. Another advertisement contained a location list and time-table for the mobile units. They appeared in newspapers which, according to the 1964 survey, had the greatest readership in the seventeen Wards.

Cinema slides :—The theme was suitably adapted for this medium.

Loudspeaker tapes :—Tapes with localised information, time-table and sites of mobile units were prepared each week. The van worked within a radius of the site of each mobile unit using the tape appropriate to the locality.

IMPACT.

From the 1964 survey it was obvious that a campaign to be effective must make an immediate impact ; from the start the maximum number of people must be made aware of its existence.

Co-ordination and timing of the various media are essential. It is a waste of effort to put out posters after a campaign has started ! The effect of all media in combination and properly timed, is cumulative. Thus poster distribution started a week to ten days before the opening day of the campaign to provide a background to the initial launching through the newspapers and television.

Advertisements were timed to appear in the newspapers in the issues which would carry the initial reports and thereafter at selected intervals from March till June.

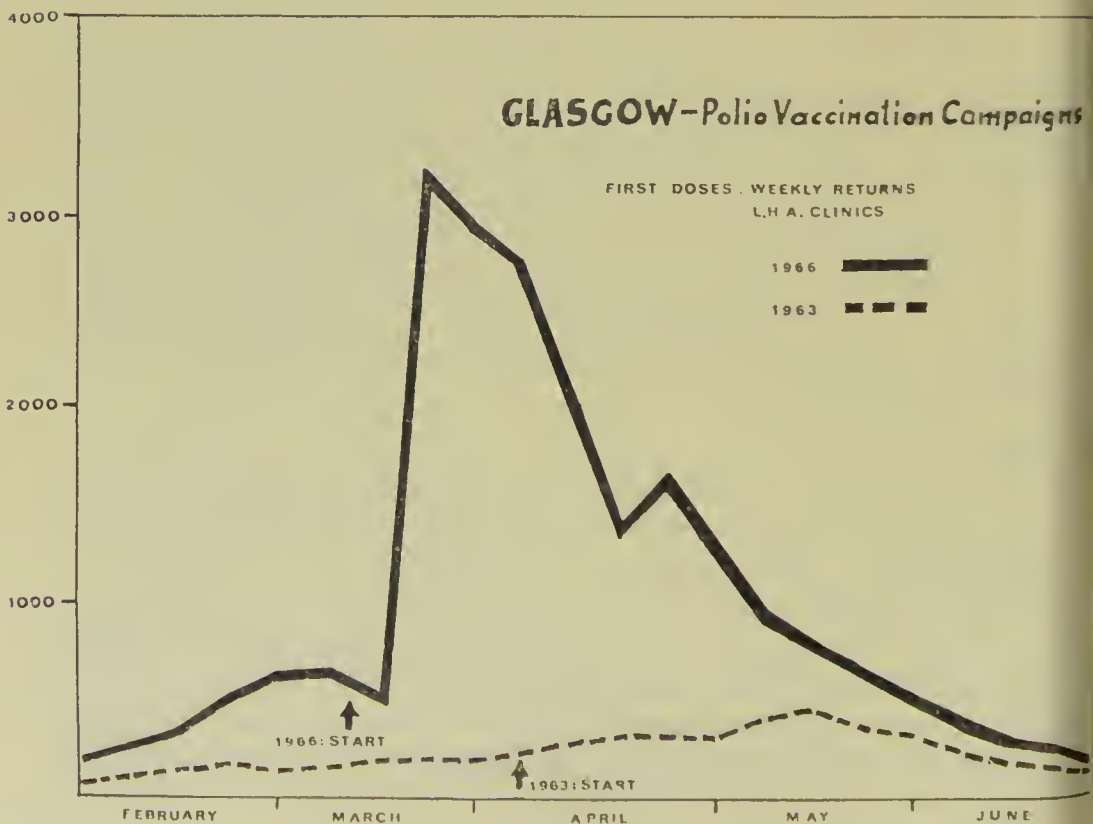
Loudspeaker vans broadcast advance messages in the seventeen Wards on the day prior to a unit taking up its position. There were repetitions on the following day to press home the point. Sundays were included on the schedule.

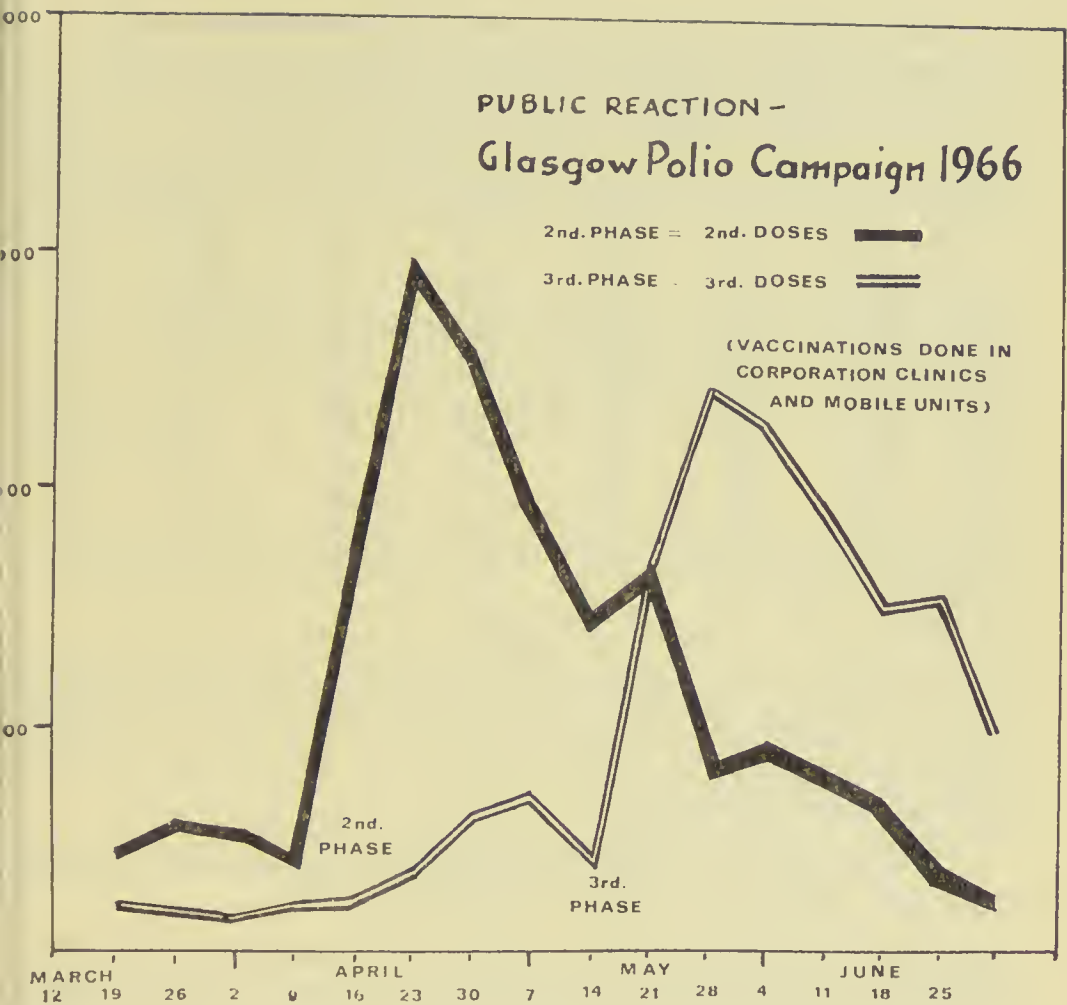
At the first Press conference, there were four during the campaign, the Convener of the Health and Welfare Committee and the Medical Officer of Health gave prepared statements on the need for vaccination in the six months' to four years' age group. A full discussion followed and front page reports were carried in the evening newspapers, and on television and radio. Further extensive reports appeared in morning papers with features at the week-end.

A GLASGOW MASS POLIO VACCINATION CAMPAIGN.

Graph showing the Effects of the 1963 and 1966 Campaigns.
(First dose only).

The Peaks on the 1966 Graphs denote Renewed Publicity Effort at each Phase of the Campaign.





A mobile clinic was sent off to its area by the Lord Provost and Convener of the Health and Welfare Committee. Its departure appeared on television and also as a newspaper photograph.

The Lord Provost also held a special Press conference within a few days of the opening campaign to underline still further its importance.

As a result of the campaign throughout the City the over-all protection was raised to a satisfactory level. A full statistical assessment of the campaign is shown on page 197. Reference is also made on page 229 of Section VIII. Infectious Disease.

Immunisation against poliomyelitis in the seventeen wards—before and after the 1966 campaign as a result of special efforts.

Years of birth, 1963-65—Births minus deaths under one year.

<i>Wards</i>	<i>Population</i>	<i>Vaccinated at 31.3.66</i>	<i>Per cent. Vaccinated</i>	<i>Vaccinated April-June</i>	<i>Vaccinated July-Sept.</i>	<i>Total Vaccinated at 30.9.66</i>	<i>Per cent. Vaccinated</i>
3	2,983	901	30.2	778	204	1,883	63.1
4	1,591	410	25.8	363	130	903	56.8
5	2,873	893	31.1	648	185	1,726	60.1
6	1,676	818	48.8	321	96	1,235	73.7
10	2,318	908	39.2	478	98	1,484	64.0
12	1,372	418	30.5	235	76	729	53.1
13	1,189	503	42.3	210	70	783	65.9
14	1,644	626	38.1	367	86	1,079	65.6
15	1,617	660	40.8	334	126	1,120	69.3
17	2,089	871	41.7	491	124	1,486	71.1
18	1,700	671	39.5	421	129	1,221	71.8
25	1,549	562	36.3	321	106	989	63.8
26	1,729	568	32.9	439	123	1,130	65.4
27	1,628	662	40.7	313	114	1,089	66.9
28	1,765	654	37.1	409	108	1,171	66.3
29	2,128	733	34.4	665	118	1,516	71.2
34	2,054	878	42.7	698	250	1,826	88.9

SUMMARY.

A campaign for polio immunisation of pre-school children in areas heavily weighted by resistant groups is probably the most difficult of all specific-action campaigns involving as it does, three separate visits to clinic or doctor.

Effectiveness lies in a high degree of organisation—intensive publicity—a persuasive health visiting team.

Communication to resistant groups is undoubtedly a problem. Perhaps local radio transmission could make for greater effectiveness.

Press and television gave full co-operation. Reports and feature articles appeared at every stage of the campaign. Newspapers carried on their splendid tradition of support for public health campaigns.

POISONOUS DRUGS CAMPAIGN, FEBRUARY, 1966.

During 1965 the Glasgow Home Safety Committee were greatly concerned with the increase in the number of home accidents due to poisonous drugs, particularly those accidents involving children under five years of age. In 1963 there were 158 such accidents; in 1964, 181.

It was decided, therefore, to obtain the support of the Health and Welfare committee in mounting a campaign in February, 1966. Full backing of the Committee and the Medical Officer of Health was obtained and the pharmaceutical organisations, the Scottish Pharmaceutical Federation and the Pharmaceutical Society of Great Britain, Glasgow Branch, agreed to co-operate during the campaign.

The aim of the campaign was to persuade individual members of the public to take stock of drugs and medicines in their homes and return those no longer required to the nearest chemist who would arrange to have them destroyed. Stress would also be laid on the importance of locking up medicines so that they would be inaccessible to children.

The campaign received wide publicity in the Press, television and radio. The opening Press conference, under the chairmanship of the Convener of the Health and Welfare Committee was attended by representatives of City and national newspapers and the Press Association.

The Chairman of the Home Safety Committee was interviewed on radio, and the Chairman and Secretary of the Glasgow Branch of the Pharmaceutical Society of Great Britain appeared on television. There were pre-campaign features in the *Evening Times* and the *Daily Record* which high-lighted the problem of poisonous drugs and home safety.

An Exhibition which ran for one week and situated in MacDonald's by courtesy of the House of Fraser was formally opened by the Lord Provost with Press and television coverage.

Posters :—A total of 5,000 posters were distributed to pharmacists, stores, transport undertakings, Corporation departments, nationalised industries, Post Offices, hospitals, etc.

Leaflets :—Ten thousand leaflets were distributed.

The Home Safety Committee feel that the Campaign has helped to draw attention to the growing problem of accidental poisoning. They consider that an impact has been made on the public by stressing the fact that 571 cases of poisoning by drugs were admitted to Glasgow hospitals in 1964, and presenting the preventive measures which can be taken by individuals. An estimate, based on returns from pharmacists in Glasgow, would indicate that over 4,000 items were returned during the campaign.

Obviously a campaign of this nature, to be fully effective, must be planned on the long-term. Public habits can't be changed, as it were, over-night.

A feature of the Exhibition was the safety medicine cabinet. There appeared to be a lack of interest in the model on show because it had no aesthetic appeal. Perhaps the Council of Industrial Design can help with a suggestion for safety medicine cabinets in various price ranges?

DISPLAY UNITS.

During the year a programme of production for display units on various health education topics was prepared. Units will be located within clinics on sites where they can be readily seen by members of the public.

SECTION VI

HOME HELP SERVICE.

This service, which was originally intended to provide help in the home during a mother's confinement now affords assistance in a variety of circumstances and without it a family may have to separate or an old or infirm person be removed to hospital for an indefinite period. Under Section 28 of the National Health Service (Scotland) Act, 1947, "A Local Health Authority may make such arrangements as the Secretary of State may approve for providing Domestic Help for households where such help is required owing to the presence of any person who is ill, lying in, an expectant mother, mentally defective, aged, or child not over school age within the meaning of the Education (Scotland) Act, 1946".

This service has been greatly appreciated by those who have had the benefit of it and in consequence is now widely known and in great demand. Applications for help under the General and "Extended" schemes decreased slightly in 1966. Despite the increase in staff from 368 in 1948 to 1,789 in 1966, the number is still inadequate to satisfy demand.

Of the 1,789 Domestic Helps employed 343 were on a whole-time and 1,446 on a part-time basis. Included in this total were 29 helps engaged on Tuberculosis cases. The heavy demand from the elderly chronic sick continues and most of the part-time workers had two cases for two hours each and most of the full-time helps had three cases per day. The following table shows the category and number of cases assisted in the past six years :—

	1961	1962	1963	1964	1965	1966
Maternity ...	2,375	2,126	1,988	1,961	1,709	1,331
General, etc.	5,583	5,963	6,713	6,647	7,089	6,999
Tuberculosis	111	117	127	121	102	85
Totals ...	<u>8,069</u>	<u>8,206</u>	<u>8,828</u>	<u>8,729</u>	<u>8,900</u>	<u>8,415</u>

The charge to individual patients for a Home Help Service varies according to means. The maximum charge remained at 34s. 4d. per day for full-time help, 17s. 2d. per half-day and 8s. 7d. for two hours. The minimum charge remained at 4s. per day for full-time and 2s. per day for part-time help. The two hours' help given on Sundays is charged at week-day rates, but the Corporation Night-sitter and Evening Services are without charge to the patient.

Old age pensioners with no other source of income receive assistance in the payment for a Home Help from the Ministry of Social Security.

MATERNITY AND CHILD WELFARE SCHEME.

Maternity cases are given priority. There was a reduction in the total number of cases helped in 1966. The period of help offered initially is two weeks although many cases finish after one week. The number of cases assisted in this section in 1966 was 1,331 of which 1,011 were confinements.

Child Welfare cases may have help for several months if a medical certificate is received with the application for an extension. Four families of motherless children were cared for in 1966, one of them having had help since 1963.

Of the total 1,331 cases assisted, 838 had full-time and 493 part-time help. The maximum charge was paid by 135 and the minimum rate by 394 cases.

GENERAL SCHEME.

These cases make the heaviest demand on the service, a large proportion of them being cases of prolonged illness or incapacity who would otherwise have to go into hospital. The service was not designed to provide permanent assistance but to give the family concerned time to make their own arrangements for securing assistance. The number of such cases assisted in 1966 was 3,863, a large percentage receiving only two hours' help per day: 73 received full-time help and 3,790, part-time help. The maximum charge was paid by 445 cases and the minimum by 2,483. Nine families of motherless children were also cared for under the General Scheme. The children in these families were all of school age. One family has been helped since 1960.

EXTENDED SCHEME.

In a large number of instances there is no family or near relative to care for the applicant who is so incapacitated by illness or infirmity as to require assistance for a more prolonged period than that permitted by the General Scheme. A special "Extended" scheme was devised in 1947 to help twelve cases which, having exhausted the maximum eight week period allowed by the General Scheme, still required assistance. Under this scheme, the charge is halved, the minimum remaining at 2s. per half-day. The number of such cases has steadily increased and in 1966, 986 new cases were added to those already receiving this help. In all, 3,043 cases were assisted in 1966 and were given two to four hours' daily help according to need. Of this total, 36 paid the maximum charge of 8s. 7d., while 2,764 paid the minimum.

DISSEMINATED SCLEROSIS SCHEME.

Owing to the peculiarly crippling nature of their disability, a similar long-term system of assistance is provided for certain cases of Disseminated Sclerosis, most of them being allowed four hours' help daily. Twenty-two new cases came under care during 1966 and the number assisted was 93. Three paid the maximum charge ; the minimum was paid by 54 persons.

TUBERCULOSIS CASES.

There were 36 new cases in 1966, bringing the total number of such cases helped in 1966 to 85 : of this number, five were given full-time help and 80 part-time. One paid the maximum charge while 65 paid the minimum.

NIGHT-SITTER AND SUNDAY, ETC., SERVICES.

A night-sitter service for cancer patients reaching the terminal stage of their illness, came into operation on 1st November, 1962. This service was initiated at the request of the Marie Curie Memorial Foundation and financed from the Foundation's funds. During 1966, 35 cases were assisted in this way.

The night-sitters are in attendance from 10 p.m. until 8 a.m. from Monday to Friday inclusive. If no relatives are available to help during the week-ends, the night-sitter attends on all seven nights. Her duties are to keep the patient clean and comfortable, give nourishment as required and allow any members of the family who are working by day to have an undisturbed night. This service is much appreciated.

A similar night service is provided by the Health and Welfare Department for other patients whose illness has reached the terminal stage. There was, however, small demand for this in 1966 and only three patients received such care.

A Sunday service was given to 197 cases, a slight decrease on last year's total.

There was also a slight decrease in the number of cases helped in the evenings of whom there were 75 in 1966.

The following table shows the illness or other condition in respect of which applications for Home Helps under the General Scheme were made in 1966 :—

<i>Illness</i>					<i>Under 40 yrs.</i>	<i>40-64 yrs.</i>	<i>65 yrs. and over</i>	<i>Total.</i>
1. Accident	...	...	...	...	9	56	217	282
2. Blindness	...	...	...	...	1	16	64	81
3. Cancer	...	...	...	...	8	79	84	171
4. Cardiac Disease	...	...	...	...	4	109	374	487
5. Circulatory Disease	...	...	...	...	1	51	228	280
6. Debility	...	...	...	...	2	12	388	402
7. Diabetes	...	...	...	...	—	8	61	69
8. Digestive Disease	...	...	...	...	—	9	40	49
9. Hemiplegia, Paraplegia, Paralysis					1	37	48	86
10. Intracranial Vascular Lesion	...				—	72	207	279
11. Kidney and Bladder Disease	...				2	17	76	95
12. Nervous Disease	...	...	...	...	13	49	70	132
13. Post Operative	...	...	...	...	19	161	195	375
14. Respiratory Diseases	...	...	...	...	6	88	332	426
15. Rheumatism	...	...	...	...	2	58	315	375
16. Senility	...	...	...	...	—	5	99	104
17. Other Causes	...	...	...	...	7	54	109	170
Totals					75	881	2,907	3,863

SECTION VII

HOME NURSING SERVICE, ETC.

The distribution of the staff of the Glasgow District Nursing Association as at 31st December, 1966, is shown as follows :—

HOME NURSING STAFF

	1966
Senior Superintendent of Home Nursing	1
Superintendent/Tutor	1
Superintendent of Homes	4
Assistant Superintendents	5
	11
Queen's Nurses on General Work	79
Queen's Nurses on Midwifery Work	18
State Registered Nurses in Training for the Queen's Roll ...	1
State Registered Nurses on full-time Nursing	22
State Enrolled Nurses on full-time Nursing	9
State Registered Nurses on part-time Nursing	32
	172

In 1966 there were 84 entrants and 73 resignations. There has been a vacancy for a Tutor since 1964, and vacancies for two Assistant Superintendents since 1965.

RECORD OF WORK FOR THE YEAR ENDED 31ST DECEMBER, 1966.

The greater part of the work is concentrated in the new housing estates.

In the " over 65 years " group the number of visits paid again shows a decrease.

The liaison with the Geriatric Hospitals continues. Eight nurses are engaged in this work. They are able to integrate the services available in the community, statutory and voluntary, to aid patients discharged from hospital.

The number of Pulmonary Tuberculosis patients treated during the year has increased by six from 1965.

PULMONARY TUBERCULOSIS.

	1962	1963	1964	1965	1966
Patients ...	408	352	305	278	284
Visits ...	21,822	16,548	16,252	14,921	23,454

MIDWIFERY.

The number of confinements attended has fallen sharply since hospital beds are more readily available.

1961	1962	1963	1964	1965	1966
1,500	1,507	1,204	1,028	727	549

NURSING APPLIANCES.

The number of appliances issued on loan during the year was 3,286, being a decrease of approximately 200 on the previous year. Some of the items issued to patients remain in use over long periods.

DISTRICT TRAINING.

Forty-one students entered for the Queen's Roll examination and all were successful.

MIDWIFERY TRAINING.

Pupils are accepted from the Glasgow Royal Maternity Hospital, and Cresswell Maternity Hospital, Dumfries, for extern training under the supervision of Approved Midwifery Teachers. Thirty Pupils from Cresswell delivered 107, and 48 Pupils from Glasgow Royal Maternity Hospital, 296 patients. In addition 36 cases were taken by Pupils from Glasgow Hospitals.

REFRESHER COURSES AND CONFERENCES.

Q.I.D.N.—Queen's Nurses.—A Course on Teaching was held in Glasgow from 12th-16th September, and was attended by 5 nurses. Senior Staff also attended various sessions.

Q.I.D.N. Course in Rehabilitation, Edinburgh, 7th-11th November.—This was attended by an Assistant Superintendent and 4 nurses.

Midwives.—Two Superintendents, 1 Assistant Superintendent, and a district nurse midwife attended the Course in Edinburgh, 8th-15th October. Four midwives attended the course 5th-12th November.

One District Nurse Midwife attended a Refresher Course in Bellshill Maternity Hospital, from 4th-17th September.

Study Day and Conference, London, 6th and 7th May, was attended by the Senior Superintendent, Superintendent/Tutor, and Superintendent of a Branch Centre.

Symposium on Geriatrics, Stobhill Hospital, 13th July.—The Senior Superintendent, Superintendent/Tutor and 12 nurses attended the Convention.

Study Day for Administrators, 17th September.—This was held on completion of the Queen's Nurses Refresher Course, and was well attended.

CASES DEALT WITH DURING THE YEAR.

Cases on books at 1st January, 1966	...	2,501	
Number of new cases added	... ..	7,564	
Number of cases dismissed	... ..	7,518	
Number of cases remaining at 31st December, 1966	... ..	2,547	
<i>Dismissed—</i>			
Convalescent	... ..	3,646	<i>General.</i>
Hospital	... ..	1,826	<i>Midwifery</i>
Died	... ..	1,101	
Removed	... ..	317	
Total number of visits paid by Nursing Staff	...	291,845	
Number of Teaching Rounds paid with Students by Administrative Staff	... ..	333	
Number of Inspections of Nurses	... ..	122	

ANALYSIS OF ALL CASES ATTENDED DURING YEAR.

Bronchitis	... ..	333	
Pneumonia	... ..	151	
Cardiac	... ..	573	
Arthritis	... ..	315	
Hemiplegia	... ..	722	
Senility	... ..	706	
Carcinoma	... ..	640	
Diabetes	... ..	227	
Puerperal Pyrexia	... ..	2	
Infectious Diseases	... ..	4	
Gynaecological	... ..	115	
Other Medical	... ..	4,157	
			7,945
Operations	... ..	—	
Post Operation Surgical...	... ..	539	
Other Surgical	... ..	578	
			1,117
Pulmonary Tuberculosis	... ..	284	
Non-pulmonary	... ..	58	
Surgical	... ..	18	
			360
Midwifery	... ..	643	
			643

SUB ANALYSIS OF CASES.

Injections.

Insulin	...	...	...	...	...	209	
Penicillin	...	...	...	...	...	811	
Streptomycin—T.B.	...	...	...	...	...	329	
Streptomycin—Others	...	...	...	...	...	30	
Anaemia Group	...	...	...	...	...	1,683	
Diuretics	...	...	...	...	...	272	
Other Injections	...	...	...	...	...	478	
							3,812

Patients 65 years and over.

Males	...	...	...	...	...	1,581	
Females	...	...	...	...	...	4,087	
							5,668

THE GLASGOW DISTRICT NURSING ASSOCIATION.

APPLIANCES ISSUED ON LOAN DURING THE YEAR ENDED 31ST DECEMBER,
1966.

<i>Appliances—</i>	<i>No. issued.</i>
Chairs	148
Walking Machines	129
Commodes	535
Water and Air Beds	6
Air Rings	410
Bed Pans	648
Bed Cradles	201
Back Rests	291
Rubber Sheets	468
Urinals	287
Warral Sticks	126
Hair Mattresses	13
Hospital Beds	4
Adult Cot Beds	7
Child Cot Beds	2
Pole and Stand	5
Hydraulic Lifters	4
Sani Chairs	2
Total	3,286

NURSING (SCOTLAND) ACT, 1951.

NURSING AGENCIES.

No new applications were made during the year, but one agency which had allowed its licence to lapse for two years, re-applied and a licence was granted. Satisfactory reports were submitted on the three existing agencies which renew their applications annually, and licences were granted in each case.

The number, therefore, of licensed agencies at 31st December, 1966 was four—one more than in 1965.

NURSING HOMES REGISTRATION (SCOTLAND) ACT, 1938.

One application for registration under the above Act, was received during the year. After inspection, registration was approved and granted.

Two homes re-applied for exemption from registration and this was approved in each case. A third home, which in former years was granted exemption, has been transferred at their own request to the register of Old Persons' Homes under the National Assistance Act, 1948.

The number of nursing homes on the register at December, 1966 was as follows :—

Registered	...	20
Exempted	...	2
		22

SECTION VIII

INFECTIOUS DISEASE.

The record low incidence of infectious disease in 1965 was reduced still further in 1966. This decrease was mainly due to an unusually low prevalence of chickenpox. The infection, which is very common in young schoolchildren, had an average incidence in the preceding five years of some 2,900 cases. There is some reason to believe that the sharp decline in 1966 is a fictitious one, attributable to incomplete or incorrect reporting rather than any change in the infection itself.

Despite this overall reduction there was some increase in three common infections—pneumonia, whooping-cough and measles.

Primary pneumonia was most prevalent in the first quarter of the year although weather conditions were not unduly severe and the increase may be associated with the significant outbreak of influenza (both Virus A and B types) which occurred during this period.

The increase in whooping-cough and measles was such as may be expected from their pattern of periodicity.

Pulmonary tuberculosis continued its slow decline in 1966 but the decrease in non-pulmonary tuberculosis was negligible.

Three cases of poliomyelitis were notified during the year but in none of these was the diagnosis confirmed and the decrease in the incidence of virus meningitis continued.

This is the tenth successive year in which there has been no case of diphtheria; the 28 cases notified were subsequently diagnosed as other disease.

In 1966 scarlet fever reached the lowest level of incidence so far recorded for this disease. There have been no deaths since 1956.

There was a marked reduction in the incidence of dysentery to its lowest level since 1949, and food poisoning, gastro-enteritis and enteric fever were less prevalent.

The downward trend in the incidence of cerebrospinal fever continues, the number of cases recorded in 1966 being the lowest yet recorded in the City.

One case each of brucellosis, anthrax and leptospira canicola occurred during the year.

There was another increase in "infective hepatitis" in 1966 and there were seven deaths from this disease.

*" This is an acute infectious disease with fever, anorexia, nausea, malaise and abdominal discomfort, followed by jaundice (Synonyms—Epidemic Hepatitis, Epidemic Jaundice, Catarrhal Jaundice)". As it is not a notifiable disease the actual incidence in Glasgow may be greater than appears from the figures given in the following table :—

Number of Cases reported.

1955	95	1961	152
1956	96	1962	57
1957	80	1963	64
1958	90	1964	218
1959	117	1965	135
1960	274	1966	149

Seven deaths were attributed to this disease in 1966, four men aged 62, 66, 67 and 69, a girl of 13 years, and two women aged 71 and 77 years.

*(Extract from "The Control of Communicable Diseases", American Public Health Association, 10th Edition, 1965.)

HOSPITAL ADMISSIONS.

Admissions to hospital during the year totalled 6,298 compared with 6,716 in 1965. This total includes 1,689 removed to hospital and ultimately diagnosed as other non-infectious disease. Pneumonia and dysentery continued to make the heaviest demand on hospital accommodation. In 1966, cases of pneumonia treated in hospital formed 43 per cent. of all infectious disease cases admitted as against 40 per cent. in 1965. More cases of this disease were admitted to hospital in 1966, but the proportion (89 per cent.) remained unchanged. Forty-seven per cent. of all dysentery cases were treated in hospital compared with 53 per cent. in 1965. This is equivalent to 18·2 per cent. of all cases of infectious disease admitted during the year. In 1965 this proportion was 23·4 per cent.

Details of notifiable and non-notifiable diseases are given in Appendix Table XIII. Table XIV illustrates the seasonal prevalence of these in 1966 and the admissions, dismissals and deaths in the four fever hospitals are shown in Appendix B.

IMMUNISATION CENTRE.

This centre at 20 Cochrane Street provides intending travellers from the West of Scotland with immunisation against yellow fever and certain other infectious diseases likely to be met with in a foreign country. During 1966 2,774 travellers were inoculated against yellow fever. In 1965 this figure was 3,450. In addition, 1,597 inoculations were given against smallpox, cholera, tetanus, typhus and enteric fever.

As in previous years, as a matter of convenience where crews of ships were concerned, rather than have a large crew attend at the clinic the immunisations were carried out on board ship. This accounted for 111 of the yellow fever inoculations and 51 of those given for cholera.

SMALLPOX AND VACCINATION.

There has been no case of smallpox in Glasgow since 1950. Compulsory vaccination or declaration of conscientious objection ceased with the inception of the National Health Service (Scotland) Act on 5th July, 1948. Notification of vaccination is now made by medical practitioners, and in 1966, 3,174 notifications of primary vaccination were received and 1,586 of revaccinations. In addition, 3,370 primary vaccinations were carried out at the Child Welfare clinics. In all, 6,544 primary vaccinations were done during the year as compared with 5,786 in 1965 and 4,520 in 1964.

The following table shows the age distribution of those vaccinated for the first time in each of the years from 1966 to date :—

Year of Vaccination	— 1	Age Group — 5	— 10	10 & Over	Not Stated	All Ages	Revacci- nations
1966	130	5,331	277	806	—	6,544	1,586
1965	161	5,064	158	403	—	5,286	937
1964	236	3,732	171	381	—	4,520	956
1963*	382	1,394	161	541	3	2,481	2,710
1962	5,283	7,362	2,185	3,982	15	18,827	17,932
1961	5,644	3,520	60	495	4	9,823	3,249
1960	5,908	3,287	163	497	7	9,862	3,417
1959	6,454	3,648	155	458	6	10,721	3,202
1958	5,754	3,965	147	325	3	10,194	3,240
1957	5,290	3,562	246	935	—	10,033	4,991
1956	5,290	3,806	173	356	7	9,632	3,877

* The sharp decrease in primary vaccinations in 1963 was a result of the introduction of a new immunisation timetable to which reference is made on page 177 of the Report for that year.

The figures for 1962 and 1963 are not comparable with those of the preceding years. An outbreak of smallpox in England and Wales in the early part of 1962 resulted in a large number of persons requesting vaccination for the first time. Some 18,000 were revaccinated with a resultant falling off in 1963.

The 1962 outbreak is a timely reminder of the ease with which this disease may still be introduced into this country and the rapidity of its spread when it does. The necessity for constant vigilance remains, especially in a city such as this, which is not only a port of call for ships from all parts of the world but is adjacent to two air terminals.

In spite of the large number of persons coming forward for vaccination early in 1962, the vaccinal state of the population in its more vulnerable age groups is still too low.

During 1966 a smallpox outbreak abroad led to stricter enforcement of the regulations for persons travelling to the Continent.

In the seventeen years from 1950 to 1966, the total number of primary vaccinations carried out was 151,019. The age distribution of this total (excluding 189 whose age was not stated) may be expressed as follows :—

In 1966, of the City's population aged :—

Under 5 years,	21,099	or 20.0 per cent.	} have been vaccinated in the course of the seven- teen years, 1950-1966.
10 years,	51,972	or 47.6 per cent.	
15 years,	44,855	or 44.8 per cent.	
Over 15 years,	32,904	or 4.9 per cent.	

Between 1960 and 1966 the proportion of children under one year of age vaccinated at the Child Welfare clinics was as follows :—

				No.	Percentage of Births.
1960	...	...	...	5,516	23.9
1961	...	...	...	5,439	23.8
1962	...	...	...	3,571	15.2
1963	...	...	...	42	0.2
1964	...	...	...	36	0.2
1965	...	...	...	53	0.5
1966	...	...	...	47	0.2

The sudden decrease in 1963 and 1964 was the result of certain changes in the immunisation procedure which took effect in 1963.

LEPROSY.

Under the Public Health (Infectious Diseases) (Scotland) Amendment Regulations of 1951, this disease became compulsorily notifiable from 1st September, 1951.

This is a disease of rare occurrence in this country and such cases as have been found in Glasgow were foreign seamen or students from tropical countries where this disease is prevalent. In the twenty years prior to notification only five cases came to the notice of this Department.

There was no case of this disease in 1966.

Since 1951 the incidence of the disease has been as follows :—

1951-1953 ...	...	...	...	...	Nil
1954-1956 ...	...	...	...	...	5
1957 ...	...	...	...	...	1
1958 ...	...	...	...	...	2
1959 ...	...	...	...	...	2
1960-1962 ...	...	...	...	...	Nil
1963 ...	...	...	...	...	1
1964 ...	...	...	...	...	Nil
1965 ...	...	...	...	...	Nil
1966 ...	...	...	...	...	Nil

MALARIA.

This disease, like smallpox and leprosy, usually occurs in seamen or servicemen, returning to the City from abroad, or in foreign visitors. During 1966, there were only four cases (all males), one under 25 years of age and three under 55. There were no deaths. Incidence in recent years was as follows :—

1956-60 ...	...	...	...	45
1961 ...	...	...	...	3
1962 ...	...	...	...	4
1963 ...	...	...	...	3
1964 ...	...	...	...	2
1965 ...	...	...	...	4
1966 ...	...	...	...	4

TYPHOID, PARATYPHOID AND DYSENTERY.

TYPHOID.

One case was registered this year, this being a Pakistani baby girl aged $1\frac{11}{12}$ years, living in the South-Eastern Division of the City, who was admitted to a children's hospital on 16th June with a diagnosis of pyrexia of unknown origin. Symptoms were pyrexia, refusal of food and slight cough, of five days duration. In hospital the baby was constipated until 19th June when the bowels were loose. The results of the blood culture done on 17th June and the rectal swab taken on 20th June were reported to be positive for *Salmonella typhi*. The Enteric Reference Laboratory, London, reported it as *Salmonella typhi*, phage type A. On 21st June the baby was transferred to an infectious diseases hospital.

The father's cousin and wife had been in Pakistan for six weeks' holiday and returned to the Glasgow address on 7th June. After three or four days, they departed for an unknown address in Manchester.

PARATYPHOID.

The number of infections registered this year was six in comparison with 41 last year. The table gives the number of home and of institutional infections and their seasonal incidence.

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Home Infections	3	1	1	1	6
Institutional	—	—	—	—	—

The following table shows the divisional distribution of the cases :—

	Central Division	Northern Division	Eastern Division	South- Eastern Division	South- Western Division	Total
Home Infections	—	1	3	2	—	6
Institutional	—	—	—	—	—	—

Two females and four males were affected.

The age and sex distribution of the cases was as follows :—

	- 1 Year		- 5 Years		- 15 Years		- 55 Years		55+ Years		Total
	M	F	M	F	M	F	M	F	M	F	
Home Infections	1	—	—	1	—	—	2	1	1	—	6
Institutional	—	—	—	—	—	—	—	—	—	—	—

In the obstetric department of a general hospital a male child was born on 30th January ; the bowels were noted to be loose and a specimen was sent to the Laboratory. The result was received on 6th February that the baby was suffering from Paratyphoid B ; he was put on Ampiclox therapy and the stool was negative on the date of discharge, 10th February.

The baby's mother, aged 26 years, had a negative stool on admission to hospital but a repeat stool examination on 7th February revealed the presence of positive Paratyphoid B. She was put on Penbritin and discharged from hospital on 10th February. One other female child in the family aged one year also proved positive for Salmonella paratyphi B.

On 9th April, a man aged 27, his wife aged 24, and daughter aged one year left Glasgow and stayed for two days at Berwick-on-Tweed. On the return journey the family had lunch with the husband's parents in Edinburgh. On 16th April the husband had diarrhoea which did not clear up and the family doctor sent a stool specimen to the laboratory.

on 22nd April ; the result, on 27th April, showed the presence of positive *Salmonella paratyphi B*. As the house was large and well kept with bath and w.c., he was treated at home. By mid June the patient had five negative urine and stool specimens.

A boy aged 15 years, accompanied by five other boys, went for a weekend's camping in Eaglesham from 23rd to 25th July. While there they drank water from the River Cart. Some time later the boy and two of his companions vomited and had diarrhoea. On their return home, the boy's mother called in the family doctor who left a faeces specimen outfit for the boy. This proved to be positive for Paratyphoid B on 11th August. The boy was admitted to an infectious disease hospital that day.

In August a man aged 70 years of age, living in the South-Eastern Division of the City, was admitted to a general hospital suffering from pneumonia. A faecal specimen taken while he was in the ward revealed the presence of *Salmonella paratyphi B* ; he was transferred to an infectious disease hospital.

There were no deaths from Typhoid or Paratyphoid.

CHRONIC CARRIERS.

There are still 12 City carriers as although C.M. Ward 32, South-Western Division, a Paratyphoid carrier, died on 16th January, S.M. Ward 13, Central Division, returned to the City. In Leverndale Hospital there are now 8 carriers as the Paratyphoid carrier M.McD. (born 1883) died during 1966. The list now stands as follows :—

TYPHOID.

JW, Ward 5, Eastern Division.—Last tested in 1962 when found still to be positive.

EG, Ward 20, Central Division.—Classed as a faecal carrier, born 1901, she has refused to submit specimens since 1933. As her original illness had dated back merely to 1932, it is not certain that she is a chronic carrier.

MJ, Ward 35, South-Eastern Division.—An immigrant, born 1912, who carries phage type O in his faeces, he was last tested in 1961, when he proved positive. His house is now occupied only by himself, his wife and their three sons. The other immigrants, formerly his housemates, have now found homes of their own.

PARATYPHOID.

MG, Ward 3, Eastern Division.—This woman, whose date of birth is 7.9.27, is a chronic faecal carrier of Paratyphoid B, phage type 1. She suffered from Paratyphoid in 1954. For some time we lost trace of her but she was found in 1963 at an address in Ward 12, Central Division, when she was admitted to a sanatorium as a case of Pulmonary Tuberculosis. She was immediately recommended for rehousing and was rehoused in the Eastern Division in May, 1963. In October, 1966 she left her Corporation house, her rent being considerably in arrears and with the five other members of her household moved to a one apartment house in a very poor property.

- JL, Ward 17, Northern Division.*—This man, born 1887, was visited in 1966 but refused to submit specimens.
- ES, Ward 15, Northern Division.*—She is the faecal carrier, born 1889, of phage type 1, whose first positive specimen had been a colostomy sample. She submitted four pairs of specimens, all the faeces specimens being reported positive. She still resides in the same excellent house with only one contact, her daughter, born 1915. The latter, who was inoculated with T.A.B. earlier in 1962, also submitted a pair of specimens. The urine was found positive; but as four subsequent pairs of specimens were negative, the first result was regarded as due to contamination. The daughter's specimens were negative in 1966. The mother's faeces specimen was positive in 1966, urine negative.
- SM, Ward 13, Central Division.*—This Paratyphoid carrier, born 1918, went to stay in Midlothian in 1964. She returned to Glasgow this year. A recent faecal specimen still proved positive.
- JE, Ward 5, Eastern Division.*—A faecal and urinary carrier since 1933, born 1890, she was last tested in 1961, when she was positive.
- LM, Ward 23, Central Division.*—A faecal carrier, born 1892, he was last tested in 1939; still working in his shoemaker's business.
- DM, Ward 24, Central Division.*—This woman, born 1894, a faecal carrier of phage type 1, was tested and found positive in 1965.
- AL, Ward 27, South-Western Division.*—This woman, born 1902, a faecal carrier of phage type 3a was found to have a positive faeces and negative urine in December, 1966.
- JJ, Ward 35, South-Eastern Division.*—This woman, born 1904, a faecal carrier of phage types 1 and 2, was last tested and found positive in 1961.

FEMALE CARRIERS IN LEVERNDALE HOSPITAL.

TYPHOID—

- MAB (born 1907)*—Faecal carrier since 1950. Phage type unknown. Last positive in 1961; 7 negative faeces and 7 negative urines during 1965.
- JC (born 1888)*—Faecal carrier since 1957. Phage type A. Last positive in 1964. Had four-week course of ampicillin in March, 1965; 7 negative faeces and 7 negative urines during 1965.
- EFC (born 1917)*—Faecal carrier since 1937. Phage type unknown. Last positive in 1957 but Vi titre of 1:80 suggests that she must still be regarded as a carrier; 7 negative faeces and 7 negative urines during 1965.
- MD (born 1892)*—Faecal carrier since 1935. Phage type A. Last positive in 1964. Had four-week course of ampicillin in March, 1965; 7 negative faeces and 7 negative urines during 1965.
- HMcB (born 1895)*—Faecal carrier since 1923. Phage type unknown. Last positive in 1957 but Vi titre of 1:40 suggests she still requires observation; 7 negative faeces and 7 negative urines during 1965.
- WP (born 1890)*—Faecal carrier since 1937. Phage type unknown. Last positive in 1958 but Vi titre of 1:40 suggests she still requires observation; 7 negative faeces and 7 negative urines during 1965.
- ET (born 1893)*—Registered as a faecal carrier in 1931 but never found positive since then. A Vi titre of 1:10 makes it doubtful that she is still a carrier; 7 negative faeces and 7 negative urines during 1965.

PARATYPHOID—

- JM (born 1899)*—Faecal carrier since 1934. Phage type unknown. Last positive in 1961; 7 negative faeces and 7 negative urines during 1965.

DYSENTERY.

There were 1,782 registrations as compared with 2,104 in the previous year. Every ward in the City was again affected but as usual there were wide differences between the numbers registered in the various wards ; for example, less than 10 cases each from Camphill and Langside, while 118 cases were registered from Mile-end and 97 cases from Calton. There was a relatively high incidence in Dalmarnock, Cowcaddens, Provan, Maryhill, Shettleston and Tollcross and Pollokshields. Other wards lightly affected with between 10 and 70 cases each included Ruchill, Woodside, North Kelvin, Anderston, Partick West, Kingston, Pollokshaws, Gorbals, Knightswood, Craigton, Townhead, Govan, Cathcart, Partick East and Kinning Park.

Seasonal incidence was as follows :—

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Home	290	335	388	614	1,627
Institutional	61	22	29	43	155

The fourth quarter was the worst.

More than half the non-institutional cases stayed at home, the number removed to hospital being 685 or 42 per cent.

The annual institutional figure for dysentery cases was low ; 26 institutions were concerned—13 medical institutions, 7 children's institutions and 6 miscellaneous residential institutions. In nine instances only a single case was notified. The largest contribution came from a psychiatric hospital where an outbreak of dysentery commenced during the last week of 1965 and was not finally concluded until the middle of March, 1966. There was a total of 36 bacteriologically confirmed cases spread over five wards, although the majority were in two wards and all were on the female side. Thirty-five of the cases were proved to be due to the Sonne organism, one to Flexner. The control of this outbreak involved the examination of specimens from approximately 250 patients and members of the staff. Due to difficulty experienced on previous occasions in controlling an outbreak occurring in several wards of this type of hospital it was found necessary for a sanitary inspector to make an almost daily visit to the hospital to keep records and advise on the collection of specimens. The control was made more difficult as the Infectious Diseases Hospitals could not find suitable accommodation to admit the vast majority of the cases for isolation and treatment and they had to be isolated as well as was practicable in the psychiatric hospital which has no suitable isolation facilities.

Another large contribution came from a children's home where there were 30 cases distributed over the year.

The following table shows the age distribution of the notifications :—

	- 1 Year	- 5 Years	- 15 Years	- 55 Years	55+ Years	Total
Home	157	825	316	281	48	1,627
Institutional	11	44	21	35	44	155

There was one death in another psychiatric hospital in which there was an outbreak of 15 cases of Sonne dysentery. This death occurred on the 29th November in a woman of 83 years of age, death being due to Sonne dysentery of five days' duration, senility and generalised arteriosclerosis.

BRUCELLOSIS (UNDULANT FEVER)

Enquiries made at all the bacteriological laboratories where the diagnosis of brucellosis might have been established have shown that only one case occurring in Glasgow was diagnosed during 1966.

The patient was a 58-year-old housewife. She became ill in December, 1965, and later had two relapses. Brucellosis was suspected but was not diagnosed definitely until May, 1966, when the agglutination titre for *Brucella abortus* was 1 : 1280.

She drank " Certified " milk, purchased from a retailer in Glasgow but produced on a farm in Dunbartonshire. The farm had a total herd of about 130 cows with usually about 48 in milk, and calves were vaccinated between five and eight months old. The herd was examined after the case was reported, when five cows were found to be excreting *Brucella abortus* and were disposed of.

A similar incident occurred during 1964 when two Glasgow residents contracted brucellosis by drinking " Certified " milk purchased in Glasgow but produced on a farm outwith the City. On that occasion examination of the herd revealed that four cows were excreting *Brucella abortus*, though the farm was considered by the local authority to be exemplary and the herd had been believed to be brucella-free as a result of two earlier veterinary checks. Such incidents emphasise the danger of drinking unpasteurised milk even of the highest quality.

DIARRHOEA AND ENTERITIS.

These infections are not yet notifiable and, as information regarding their prevalence was not readily available, comment has up to 1952 been limited to the mortality from this infection in children under two

years of age. From 1953 onwards, all cases of diarrhoea and enteritis coming to the attention of the Department have been recorded.

The following table shows the age, distribution of all cases so recorded since 1961, but is not a complete picture of the incidence of diarrhoeal infection in the City :—

		Age Distribution				
Age in Years	...	1966	1965	1964	1963	1962
—1	...	336	309	401	406	360
—2	...	25	38	40	24	25
—5	...	6	25	11	8	13
5 and over	...	25	30	18	12	11
		<u>392</u>	<u>402</u>	<u>470</u>	<u>450</u>	<u>409</u>

The seasonal distribution of cases in the past five years shows little variation :—

		1966	1965	1964	1963	1962
Ist Quarter	...	53	114	91	97	74
2nd Quarter	...	97	91	132	100	111
3rd Quarter	...	129	99	141	141	131
4th Quarter	...	113	98	106	112	93
		<u>392</u>	<u>402</u>	<u>470</u>	<u>450</u>	<u>409</u>

In 1966, there were 18 deaths in all as against 22 in 1965 and 29 in 1964. Enteritis and colitis (under two years of age) accounted for 5 male and 10 female deaths (all but one under one year of age) and diarrhoea of the newborn for the death of two males and one female.

There has been a steady decrease in infant mortality since 1963. In 1966 the rate for the first time was less than 1 per 1,000 (0.91).

The decrease in the number of deaths and in the mortality rate since 1947 is shown in the following table which is based on figures compiled in this Department.

	Males		Females		Total	—1 year per 1,000 Births
	—1 year	—2 years	—1 year	—2 years		
1947	339	5	221	9	574	22
1948	156	5	86	3	250	11
1949	100	13	57	6	176	7
1950	50	2	39	3	94	4
1957	7	—	16	—	23	1.0
1958	14	—	8	—	22	1.0
1959	26	1	16	—	43	1.85
1960	12	3	14	—	29	1.26
1963	12	2	20	—	34	1.41
1964	9	—	20	—	29	1.29
1965	8	1	12	1	22	1.05
1966	7	—	10	1	18	0.91

Deaths from Enteritis and Colitis over two years of age numbered 39 as compared with 31 in 1965. Three were children between the ages of two and five years and one a young man under 20 years. The other 35 were all over 35 years of age.

In the Registrar General's Return for 1966, Enteritis is one of a group of diseases "Gastritis, duodenitis, enteritis and colitis" of which only the combined total is given, and in different age grouping as follows:—

		Males	Females	Both Sexes
Under 4 weeks	...	—	—	—
4 weeks to 1 year	...	10	10	20
1 year to 5 years	...	2	3	5
and each quinquennia	...			
over 5 years	...	17	26	43
		<u>29</u>	<u>39</u>	<u>68</u>

Diarrhoea of the Newborn, which is not included in these figures is not shown separately but is merged with other causes in the group "Infections of the Newborn".

FOOD POISONING.

The number of incidents of food poisoning notified to the Department during 1966 was 87. During the past three years, the number has been falling steadily and this year again the fall has been accompanied by a decrease in the number of cases.

	Incidents			Cases		
	1964	1965	1966	1964	1965	1966
Community Outbreaks	11	6	4	281	60	67
Family Outbreaks ...	36	26	21	115	84	82
Sporadic ...	77	68	62	77	68	62
Total ...	<u>124</u>	<u>100</u>	<u>87</u>	<u>473</u>	<u>212</u>	<u>211</u>

The seasonal incidence is shown on the following table:—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Community Outbreaks ...	—	—	2	—	—	—	—	—	1	—	1	—
Cases ...	—	—	53	—	—	—	—	—	2	—	12	—
In more than One Family												
Outbreaks ...	—	—	—	—	—	1	1	—	—	—	—	—
Cases ...	—	—	—	—	—	19	4	—	—	—	—	—
Family												
Outbreaks ...	—	1	4	1	2	1	2	4	1	2	—	1
Cases ...	—	3	10	3	4	4	6	13	4	5	—	7
Sporadic Cases	5	4	1	2	9	5	4	9	7	8	5	3

There was a large community outbreak in the month of March involving 51 people (11 adults and 40 children) caused by a meal supplied

by a School Kitchen. Butchers delivered 50 tongues in meat trays to the Kitchen at about 7.15 a.m. on Friday, 11th March. Three or four tongues were placed in each of 15 stainless steel trays which were all in the steamer by 7.30 a.m. They were cooked for about five hours, being removed from the steamer at about 12.30 p.m. They were then skinned and boned, placed in cylindrical stainless steel containers with stainless steel tops and bottoms and allowed to cool and set before being put into the refrigerator. They were taken from the refrigerator on Monday, 14th March, when they were sliced and served cold for lunch.

No bacteriological investigation of the patients was made, but the clinical features, viz., the incubation period, the nature and severity of the symptoms and the rapid recovery even in severe cases, strongly suggested that the illnesses were due to poisoning with the toxin of *Clostridium welchii*.

Another community outbreak involving 12 people occurred in November. These people became ill, suffering from diarrhoea and vomiting, after eating a meal in their office canteen. The cause was suspected to be corned beef and the corned beef which they had eaten was examined at the Laboratory. *Staph. aureus*, phage type 52/79W/81, was isolated from this sample but examination of a control tin of corned beef proved negative for *Staph. aureus*.

The majority of family and sporadic cases were caused by *Salmonellae* infections, and the dominant organism this year again, *Salmonella typhimurium* which was isolated in 36 out of a total of 92 cases of *Salmonella* infections.

Salmonella infantis was isolated in 22 cases. In the month of June a family of 12 people ate a reheated steak pie at a christening party; they all suffered from *Salmonella infantis* food poisoning. In the same month another family of 7 people also ate a reheated steak pie which had been purchased from the same bakery; they too all suffered from *Salmonella infantis* food poisoning.

TYPE OF ORGANISM.

	Family Incidents	Outbreaks Cases	Community Incidents	Outbreaks Cases	Sporadic Cases	Total Cases
<i>Salmonellae</i> ...	12	49	2	4	39	92
<i>Staphylococcus</i>						
(Aureus) ...	1	4	1	12	1	17
(Toxin) ...	—	—	—	—	—	—
<i>Clostridium welchii</i> ...	1	7	1	51	1	59
Unknown ...	7	22	—	—	21	43
Total ...	21	82	4	67	62	211

Several unusual strains of *Salmonellae* made their appearance or re-appearance in the City. In this group were *Salm.eimsbuettel*, *Salm.panama*, *Salm.heidelberg*, *Salm.havana* and *Salm.stanley*.

SALMONELLA ORGANISMS.

Salmonella—					
budapest	...	...	...	...	7
dublin	...	...	...	...	2
eimsbuettel	...	...	...	...	1
enteritidis	...	...	...	...	6
havana	...	...	...	...	1
heidelberg	...	...	...	...	4
infantis	...	...	...	...	22
panama	...	...	...	...	2
stanley	...	...	...	...	7
typhimurium	...	...	...	...	36
unidentified	...	...	...	...	2
unspecified	...	...	...	...	2
Total					92

No deaths were reported as a result of food poisoning during 1966.

From the point of view of investigation of the aetiology of causes 1966 showed some improvement, there being 43 cases whose aetiology remained unknown this year in comparison with 93 cases last year.

SCARLET FEVER.

The decline in the incidence of scarlet fever has continued, only 175 cases being registered during 1966, compared with 240 during 1965. Only 36 patients (20·6 per cent.) were treated in hospital.

The incidence of this disease during the last five years is set out below :—

		Total Cases	Treated in Fever Hospitals	Treated in Other Institutions	Treated at Home
1962	...	278	117	1	160
1963	...	274	91	—	183
1964	...	353	95	2	256
1965	...	240	52	3	185
1966	...	175	35	1	139

Of the 175 patients, 70 (40·0 per cent.) were under the age of five, though only five were under the age of one; 98 (56·0) were aged between 5 and 15 years and 7 (4·0 per cent.) were over 15, none being over 35.

The seasonal incidence is shown in Appendix Table XIV.

No cases occurred in the Anderston Ward. The Springburn, Park and Craigton Wards had one case each, and the Dennistoun, Townhead, Fairfield, Pollokshields and Langside Wards two cases each. The wards with the largest number of cases were Dalmarnock, Maryhill and Knightswood with eleven cases each and Calton and Ruchill with ten cases each.

There have been no deaths from scarlet fever since 1956.

ERYSIPELAS.

The decline in the incidence of this disease continued in 1966 when there were 26 cases compared with 29 in 1965 and 38 in 1964. All but five were females.

The age distribution of the cases was as follows :—

—15 years	...	1	—45 years	...	2
—25 years	...	—	—65 years	...	10
—35 years	...	—	65 + years	...	13

There was one death in 1966, a woman over eighty years of age.

The decline in mortality in recent years is as follows :—

Deaths				Deaths			
1930-39 (average)	...	46		1958-60	...	...	—
1940-45 do.	...	8		1961-64	...	...	1
1946-50 do.	...	6		1965	...	...	—
1951-56 do.	...	1		1966	...	...	1
1957 ...	...	...	1				

PUERPERAL FEVER AND PYREXIA.

As in previous years these conditions have been discussed in the section "Maternity and Child Welfare" (page 117). As a result of alterations in the International Classification of Causes of Deaths, deaths from these two infections no longer appear under separate headings in the "Short List" but are now included in the group "Complications of Pregnancy, Childbirth and Puerperium".

DIPHTHERIA.

Apart from one fatal imported case in 1964, there have been no cases of diphtheria in Glasgow since 1956 and no deaths from this disease since 1954.

The following table, apart from its historical interest, graphically represents a lesson in the value of intensive preventive medicine.

Year				Cases	Deaths
1940	...	...	...	5,190	226
1941	...	...	...	4,039	155
1942	...	...	...	3,325	90
1943	...	...	...	2,919	81
1944	...	...	...	2,377	62
1945	...	...	...	1,970	33
1946	...	...	...	1,458	37
1947	...	...	...	502	13
1948	...	...	...	286	8
1949	...	...	...	154*	5
1950	...	...	...	86	—
1951	...	...	...	134*	4
1952	...	...	...	86	7
1953	...	...	...	50	—
1954	...	...	...	12*	1
1955	...	...	...	2	—
1956	...	...	...	1	—
1957-1966	...	...	...	—	—

(* Includes carriers—3 in 1949, 4 in 1951 and 2 in 1954).

Immunisation.—The following table shows the number of children who completed a primary course of diphtheria immunisation in 1966.

The 1965 figures are shown for comparison.

Vaccine used	Under 5 years		Over 5 years	
	1966	1965	1966	1965
Diphtheria only	2	2	—	1
Diphtheria and Pertussis	4	39	—	—
Diphtheria and Tetanus	141	128	10,683	7,137
Pertussis, Diphtheria and Tetanus	12,533	12,456	208	117
	12,680	12,625	10,891	7,255

All ages ... 1966=23,571 1965=19,880

The numbers who received maintenance inoculations in these two years were as follows :—

	Under 5 years		Over 5 years	
	1966	1965	1966	1965
Diphtheria	—	1	5	5
Diphtheria and Pertussis	1	1	2	—
Diphtheria and Tetanus	215	129	20,545	9,260
Pertussis, Diphtheria and Tetanus	3,954	2,972	477	412
	4,170	3,103	21,029	9,677

All Ages ... 1966=25,199 1965=12,780

See also page 150 of the School Health Service section of this Report.

DISEASES OF THE CENTRAL NERVOUS SYSTEM. CEREBROSPINAL FEVER (MENINGOCOCCAL INFECTION).

There was another decrease in the incidence of this disease in 1966 there being 28 cases registered compared with 38 in 1965. The figure for 1966 is the lowest number ever recorded in the City and there has been a decrease every year since 1962.

The age incidence was :—

Under 1 year	1-5 years	5-15 years	Over 15 years
12	11	3	2

The cases were distributed throughout the City with no significantly high incidence in any municipal ward but the South-Western Division had no cases.

The highest incidence occurred during the first quarter of the year when 15 cases were recorded.

Deaths from Meningococcal infection.—There were 7 deaths recorded compared with 5 in 1965. Five of the deaths were under one year, one 1 year and one 5 years of age.

The incidence and fatality rate from Meningococcal infection from 1951 is :—

Year	Cases Registered	Deaths	Fatality Rate per cent.
1951	126	15	12
1952	101	10	10
1953	123	12	10
1954	90	16	18
1955	96	13	13
1956	66	8	12
1957	57	9	16
1958	72	10	14
1959	77	4	5
1960	52	10	19
1961	68	7	10
1962	59	4	7
1963	50	5	10
1964	44	7	16
1965	38	5	13
1966	28	7	25

It will be seen that although there has been a continual fall in the incidence of meningococcal infection the number of deaths remains significantly high and the disease is still a significant cause of death. As the disease no longer occurs in epidemic form and is almost unknown amongst contacts of patients there is little hope that the incidence can be reduced by Public Health measures. The disease appears to be more a problem of susceptibility to, than prevalence of, infection.

POLIOMYELITIS.

There was no case of poliomyelitis during the year 1966. This is the fourth consecutive year that the City has been free of this disease.

As wild strains of poliomyelitis virus are becoming less prevalent there will be less opportunity for anyone to acquire a natural immunity. Thus it is imperative that the percentage of children immunised be kept to a high level.

Poliomyelitis Vaccination.—During the year 36,201 persons were given a primary dose of vaccination and 23,844 were given a reinforcing dose. Oral vaccine was generally used, inactivated vaccine (Salk or Quadruple vaccine) being used in 0.5 per cent. of primary vaccinations and in 0.2 per cent. of reinforcing doses. In all, some 132,437 doses of vaccine were given, 31,602 (23.9 per cent.) by general practitioners, 80,675 (60.9 per cent.) by the Child Welfare Service and 20,160 (15.2 per cent.) by the School Health Service.

The table below gives the primary vaccinations during the year grouped according to year of birth, age group and vaccine used.

PRIMARY POLIOMYELITIS VACCINATIONS IN 1966.

		Persons Receiving—			
Year of Birth	Age at 31.12.66	Second Injection of Salk Vaccine or Third Injection of Quadruple Vaccine		Third Dose of Oral Vaccine	Total
1966	Under 1 year	15		3,907	3,922
1965	1 year	105		13,077	13,182
1964	2 years	24		5,121	5,145
1963	3 years	16		4,339	4,355
1962	4 years	5		3,830	3,835
1961	5 years	5		2,903	2,908
1943-1960	6-23 years	3		2,055	2,058
1933-1942	24-33 years	—		447	447
Others	—	1		348	349
Total		...	...	174	
				36,027	36,201

The following table gives the vaccination position at 31.12.66 of children under five years of age:—

Age			Number Vaccinated	Per Cent. Vaccinated
0—	...	...	3,922	20.5
1—	...	...	15,631	78.8
2—	...	...	16,471	78.7
3—	...	...	16,423	78.8
4—	...	...	16,662	78.1

Polio Campaign.—Making a correction for migration based on the changing population estimate which has been progressively falling, it was estimated that of the child population aged six months to 4 years at 31.12.65 some 58 per cent. had been protected. With the risk of infection in the summer and autumn of 1966 it was essential that this level of protection should be raised and a campaign was planned for the Spring of 1966, the plan and conduct of the campaign being described in the Section on "Health Education" on page 193. Following this group of children through the period of the campaign until 30.9.66 an additional 21,700 had been protected giving an estimated level of protection of over 80 per cent. The level of protection reached was particularly high in those children born in the first half of 1965 and in those born in 1961, the high level in the latter instance being influenced by the poliomyelitis outbreak of 1962. At 31.12.66 this group of children were aged 18 months to five years.

VIRUS MENINGITIS.

(LYMPHOCYTIC OR ASEPTIC MENINGITIS).

Virus meningitis is usually a mild disease recognised as a clinical meningitis. The condition is caused by a multiplicity of viruses, many of which are responsible for a transitory infection of the alimentary tract. A few of these viruses can attack the central nervous system and give rise to a degree of paralysis or paresis and indeed simulate the picture of poliomyelitis.

During the year 1966 there were 29 cases of virus meningitis occurring in the City. Cases treated in Glasgow hospitals, but arising outside the City, were not included in this analysis. The dramatic fall evidenced last year, when there were 69 cases, continued.

The identification of the viruses implicated in causing virus meningitis is set out according to age and sex of the case in the following table:—

Age Group Sex	—1		—2		—5		—10		—15		—25		—35		—45		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Mumps	...	...	...	...	2	—	1	2	—	—	1	—	—	—	—	—	4	2	6
ECHO Type 1	...	...	...	...	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1
6	...	...	...	...	—	—	1	—	2	—	—	—	—	—	—	—	3	—	3
30	...	...	...	...	—	—	1	—	—	—	—	—	—	—	—	—	1	—	1
Adenovirus	...	...	...	...	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Herpes Simplex	...	...	...	...	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
Unidentified	...	...	...	...	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1
Virology Negative	...	...	2	—	3	—	2	1	1	1	2	—	2	—	—	—	10	4	14
		2	—	—	7	—	5	4	3	2	4	—	—	2	—	—	21	8	29

Of the total of 29 cases there were 21 males and 8 females. Children and young persons were principally affected, with 21 cases occurring between the ages of two and 15 years. There was no case over 45 years and only two under two years of age.

The viruses of Mumps and ECHO accounted for most of the cases. Mumps, with six cases, continued to feature prominently. Various types of the ECHO virus accounted for five cases, a contrast from 1965 when the Coxsackie virus predominated. The number of cases, with the causative virus, occurring annually is set out in the following table :—

Virus				1962	1963	1964	1965	1966
Mumps	...	...	...	6	19	34	9	6
Coxsackie Type	A2	...	...	—	—	2	—	—
	A7	...	...	—	12	3	—	—
	A8	...	...	—	—	1	—	—
	A9	...	...	4	3	9	3	—
	A14	...	...	—	2	—	—	—
	B2	...	...	—	3	7	—	—
	B3	...	...	—	—	2	2	—
	B4	...	...	—	2	6	1	—
	B5	...	...	1	3	1	13	—
	B6	...	...	—	1	1	1	—
	B1-6	...	...	—	2	—	—	—
ECHO Type	1	...	...	—	—	—	1	1
	2	...	...	2	—	—	—	—
	4	...	...	—	28	4	—	—
	5	...	...	—	—	1	—	—
	6	...	...	2	1	—	2	3
	7	...	...	1	1	4	—	—
	8	...	...	—	—	1	—	—
	9	...	...	2	—	50	1	—
	10	...	...	—	—	—	—	—
	11	...	...	—	6	4	—	—
	14	...	...	—	1	2	—	—
	25	...	...	—	—	3	—	—
	27	...	...	—	—	—	1	—
	30	...	...	—	—	—	—	1
Adenovirus	...	...	...	1	6	6	2	2
Herpes Simplex	...	...	...	—	—	8	—	1
Respiratory Syncytial	...	...	...	—	—	1	—	—
Unclassified	...	...	...	1	—	—	1	—
Unidentified	...	...	...	—	8	—	—	—
Virology Negative	...	...	...	—	130	—	32	14
Total				20	228	150	69	29

Cases of virus meningitis occurred regularly throughout the year with a peak incidence during July. Mumps tended to occur sporadically, especially during the later months of the year.

SEASONAL DISTRIBUTION.

Month	Mumps Virus	ECHO Type 1 Virus	ECHO Type 6 Virus	ECHO Type 30 Virus	Adeno- virus	Herpes Simplex	Unidenti- fied Virus	Virology Negative	Total
January ...	—	—	—	—	—	—	—	—	—
February ...	—	—	—	—	—	—	—	—	—
March ...	—	—	—	—	—	—	—	2	2
April ...	—	—	—	—	1	—	—	1	2
May ...	—	—	—	—	—	—	—	3	3
June ...	1	—	1	—	—	—	—	—	2
July ...	3	—	1	—	1	—	1	3	9
August ...	—	—	1	—	—	1	—	1	3
September ...	1	1	—	—	—	—	—	1	3
October ...	—	—	—	1	—	—	—	1	2
November ...	—	—	—	—	—	—	—	1	1
December ...	1	—	—	—	—	—	—	1	2

DISTRIBUTION BY WARDS.

No Cases	1 Case	2 Cases	3 Cases
6, 8, 11,	2, 3, 4,	1, 7, 9,	18
14, 16, 17,	5, 10, 12,	21, 28, 32	
22, 23, 24,	13, 15, 19,		
26, 29, 30,	20, 25, 35,		
31, 33, 34,	36		

Cases of virus meningitis were scattered throughout the City but with no significant distribution.

ENCEPHALITIS.

Viral Encephalitis.—There have been only sporadic cases of this infection since the small outbreak which occurred in 1937.

There were no cases in 1966 but one death, of a 17-year-old girl, was attributed to "Acute Encephalitis".

Post-Encephalitis Lethargica.—A group of cases, 23 in number, the remaining survivors of a Glasgow epidemic which affected 70 persons in all, has been under continuous supervision of Dr. Ashie Main since 1923. There were three deaths during the year. The following tables show the physical capacity of the remaining 19 cases in the Spring of 1967 :—

PHYSICAL CONDITION.

	Males	Females	Total
Fit for housework ...	—	6	6
Fit for employment ...	4	—	4
Unfit but going about ...	3	2	5
Bedridden at home ...	—	—	—
Cases in General Hospital ...	2	—	2
Cases in Mental Hospital ...	—	—	—
Cases untraced ...	1	1	2
	<u>10</u>	<u>9</u>	<u>19</u>

These cases are classified as follows

		Spring 1967	Spring 1966
Group I.	Recovery complete	3	3
Group II.	Recovery incomplete :—		
	Class A. Mental Retardation...	1	1
	Class B. Mental Instability ...	1	1
	Class C. Nervous Instability ...	9	11
Group III.	Perversion of Conduct ...	—	—
Group IV.	Parkinsonians :—		
	Class A. Normal Mentality ...	3	2
	Class B. Abnormal Mentality	5	3
Group V.	Died	—	3
		<u>22</u>	<u>22</u>

There has been little change in the condition of these 19 cases during the past year, although a few have improved.

MEASLES.

Measles is not notifiable in Scotland and cases are registered mainly on information received from Head Teachers and School Attendance Officers. The figures are therefore incomplete but they give a reasonably accurate picture of the incidence in the school age group. There were 2,000 registered cases in 1966, an increase of 668 from the previous year ; 242 cases were admitted to hospital. There were three deaths.

The recorded incidence of Measles during the last five years was :—

Year	Registered Cases	Deaths	Fatality per cent.
1962	2,066	2	0.09
1963	2,296	3	0.13
1964	2,317	3	0.13
1965	1,332	—	—
1966	2,000	3	0.15

The quarterly percentage incidence of measles during 1966 and the previous two years was :—

PERCENTAGE OF YEAR'S TOTAL.

	1964	1965	1966
1st Quarter	11	71	4
2nd Quarter	25	25	10
3rd Quarter	11	2	12
4th Quarter	53	2	74

The age and sex distribution in 1966 was :—

Age		Male	Female	Total
—1	...	35	14	49
—5	...	202	203	405
—15	...	796	747	1,543
15 +	...	1	2	3
		1,034	966	2,000

Vaccines for measles immunisation have been developed and used, and preliminary assessment suggests that they will prove efficacious.

RUBELLA (GERMAN MEASLES).

Rubella is not notifiable and, as in Measles, cases are registered mainly on information from school sources. There were 25 cases registered in 1966, as compared with 35 in 1965 and 245 in 1964.

The age and sex distribution was :—

Age		Male	Female	Total
—1	...	—	—	—
—5	...	4	3	7
—15	...	10	6	16
15 +	...	2	—	2
		16	9	25

The importance of this condition is the possibility of foetal damage (estimated at 10 per cent.) if the mother develops Rubella during the first three months of pregnancy.

WHOOPING COUGH.

There was an increase in the incidence of whooping cough in 1966, 876 cases being notified compared with 459 cases in 1965. Of the 1966 cases, 15 per cent. were under one year of age and 34·5 per cent. between one and five years ; 163 cases were admitted to hospital and there were no deaths. There have thus been no deaths in the past three years.

The annual incidence of whooping cough since 1940 has been :—

		Cases	Deaths	Fatality per cent.
Average 1940-44	...	4,463	92	2.06
Average 1945-49	...	3,321	32	0.96
Average 1950-54	...	4,794	13	0.26
Average 1955-59	...	2,276	3	0.11
Average 1960-64	...	1,657	1	0.07
1960	...	3,745	4	0.11
1961	...	824	—	—
1962	...	272	—	—
1963	...	2,695	2	0.07
1964	...	751	—	—
1965	...	459	—	—
1966	...	876	—	—

This shows that the incidence of whooping cough remains at a low level compared with the years before 1961 and the number of deaths has fallen very markedly, especially since 1955. This fall coincides with both the more extensive use of whooping cough vaccination and the introduction of effective antibiotic treatment of the disease and its complications.

Vaccination against Whooping Cough.—The number of children given a primary course of vaccination against whooping cough in 1966 is shown in the section on Diphtheria Immunisation, page 226. Approximately half the population under five years has been protected against whooping cough. It is not considered necessary to vaccinate children over five years against whooping cough.

CHICKENPOX.

Only 993 cases of chickenpox were brought to the notice of the Department in 1966 compared with 2,431 in 1965.

Since 1960 the incidence of this disease has been as follows :—

1950-54 (average)	...	7,154
1955-59 (average)	...	5,109
1960	...	8,989
1961	...	3,180
1962	...	3,558
1963	...	2,149
1964	...	3,247
1965	...	2,431
1966	...	993

Cases are removed to hospital only in special circumstances, e.g. when occurring in institutions, children's homes, etc. During 1966, 50 cases were removed to hospital. The disease is probably much more

prevalent than the bookings indicate, for it is mostly on information obtained from school attendance officers that cases are registered. The distribution throughout the City was as follows :—

Central	99
North	225
East	88
South-East	433
South-West	130
Institutions and Harbour	18
	993

The wards chiefly affected were Pollokshaws (201) and Cathcart (129) in the South-East ; Maryhill (104) in the North. Three wards had from 45 to 49 cases.

More than one-third of the cases (391) occurred in the second quarter of the year, incidence reaching a peak in May, with 175 cases. There were no deaths in 1966.

PEMPHIGUS NEONATORUM.

For the fifth year in succession no cases of this disease were reported. In 1961 there were 12 cases and as recently as 1959, 44.

RABIES.

No case of rabies is known to have occurred, but the number of instances of persons being injured by dogs or other animals each year is considerable.

From information supplied by the Police Department, the number of persons injured by animals in 1966 and 1965 was as follows :—

	1966	1965
Injured by Dogs	766	784
Injured by Horses	5	2
Injured by Other Animals	2	1

TRACHOMA.

Trachoma was made notifiable in Glasgow in 1914 under the provisions of the Infectious Diseases (Notification) Act, 1889, and in

the table below is shown the number of cases notified and the number verified each year for the past six years :—

Year			Number of New Cases Notified	Definite (Cases)
1961	...	...	—	—
1962	...	...	3	3
1963	...	...	5	5
1964	...	...	2	2
1965	...	...	2	2
1966	...	...	3	3

Two of the new cases notified were from Pakistan and appeared to have had the condition for some time. There is little doubt they were both infected abroad.

During the year three died and seven were transferred to other areas, leaving 53 cases on the register at the end of 1966.

NUMBER OF CASES ON REGISTER.

Year			Definite Cases	Total
1961	...	...	74	74
1962	...	...	67	67
1963	...	...	67	67
1964	...	...	64	64
1965	...	...	60	60
1966	...	...	53	53

At the special clinic patients made a total of 500 attendances and during the same period the nurse made 132 home visits. No home contacts developed the disease during the year. One patient required treatment in hospital.

ANTHRAX.

One case occurred in 1966 compared with two in 1965. No other cases have occurred since Anthrax became notifiable in 1960 under the Public Health (Infectious Diseases) (Scotland) Amendment Regulations, 1960.

The patient was a male, aged 60, who gave a history of having cut himself on the left side of neck when shaving with a safety razor. Within one week of this incident he developed an extensive area of erythema and non-pitting oedema around the site of the cut and the central position of this area was made up of a black eschar, two inches in diameter, surrounded by minute vesicles. Antibiotic therapy had been given before swabs were taken from below the eschar and surrounding area. The Gram film from the latter revealed a few large Gram positive bacilli which were regarded as suggestive of anthrax. The

patient was employed as a green-keeper and had used fine bone meal as a fertiliser on the bowling-green. This bone meal had been imported and during the year several samples examined at the port of entry had been shown to contain bacillus anthracis.

INFECTIONS DUE TO *L. ICTERO-HAEMORRHAGIAE* AND *L. CANICOLA*.

Leptospira ictero-haemorrhagiae (*Weil's Disease*).—There were no cases notified during 1966.

The incidence of this disease since 1955 is shown as follows (Glasgow cases only) :—

1955	...	1	1961	...	—
1956	...	4	1962	...	2
1957	...	—	1963	...	—
1958	...	—	1964	...	1
1959	...	1	1965	...	1
1960	...	—	1966	...	—

Infection due to Leptospira Canicola.—One case was reported during 1966.

The incidence of *L. canicola* since 1955 is as follows :—

1955	...	—	1961	...	1
1956	...	—	1962	...	2
1957	...	—	1963	...	6
1958	...	3	1964	...	4
1959	...	1	1965	...	4
1960	...	2	1966	...	1

The case was a male, aged 21, who was admitted to hospital on 27th December as a pyrexia of unknown origin. There was conjunctivitis and meningism but no jaundice. All initial tests, including Schuffner, were negative but a repeat Schuffner test 14 days later revealed a titre to *L. canicola* of 1 : 10,000. The man was employed at a piggery where other cases have occurred in previous years. It is considered now that pigs form a source of infection for this condition.

SCABIES.

The fall in the number of cases seen over the past few years appears to have been arrested and this year there is a slight increase in both the number of cases recorded and the number of families affected. The number of cases has increased from 1,002 to 1,048, while the number of families involved has increased from 460 to 484. The greatest increase has been seen in the Eastern Division where the number of families involved has increased from 109 to 169, with an increase in cases from 297 to 396.

The following table shows the position in 1966 in each of the five Divisions, as compared with the previous year :—

Division	No. of Families		No. of Cases	
	1966	1965	1966	1965
Central	89	79	188	160
Northern	119	136	248	290
Eastern	169	109	396	297
South-Eastern	53	86	113	170
South-Western	54	50	103	85
	<u>484</u>	<u>460</u>	<u>1,048</u>	<u>1,002</u>

INFLUENZA.

There was a significant outbreak during the first quarter of the year and virological evidence indicates that both virus type A and type B were involved.

As the disease is not notifiable an estimate of its incidence must be taken from the following sources :—

1. Isolation of virus or identification by significant rise in titre—from the weekly reports of laboratories in the Western Region.
2. New claims for sickness benefit made to the Ministry of Social Security.
3. Notified cases of Influenzal Pneumonia.
4. Deaths from Influenza.

ISOLATION OR IDENTIFICATION OF INFLUENZA VIRUS, 1966.

Type	Para-influenza virus			Influenza virus			Total
	Serology		Isolation	Serology		Isolation	
	1	2	3	1	2	3	
1st Quarter ...	4	—	—	—	—	1	95
2nd Quarter ...	12	—	1	1	1	—	42
3rd Quarter ...	2	—	—	1	—	1	—
4th Quarter ...	1	—	1	3	1	1	2
	19	—	2	5	2	3	139
							84
							18
							16
							25
							1
							—
							—
							—
							—
							314

Both types A and B were predominant during the first and second quarter of the year and especially during the first quarter. There were very few identifications during the second half of the year.

WEEKLY RETURNS OF NEW CLAIMS FOR SICKNESS BENEFIT.

The total number of new claims for sickness benefit made in Glasgow each week during the year normally runs in the region of between five and seven thousand. More than seven thousand claims were made

during the eight consecutive weeks ending 11th January to 1st March inclusive. The figure reached 15,800 on February 1 and 17,900 on February 8 and thereafter fell away to the normal level on March 8. This maximum figure of over 17,000 new claims is the greatest figure returned since the major outbreak of influenza due to A/Asian Virus in 1957 when the maximum weekly new claims reached over 30,000. A comparable figure, however, occurred in 1959 when claims reached a maximum figure of 15,000 during one week in the early part of the year. This period in 1959 was, however, complicated by extensive fog in the area which did not occur in 1966 and this fog as well as influenza may have been the cause of the high figure in 1959 leaving the situation that no comparable figure to 1966 has occurred since 1957.

SEASONAL DISTRIBUTION OF NOTIFIED CASES OF INFLUENZAL
PNEUMONIA, 1966.

January	...	...	5
February	...	...	9
March	...	...	4
April	...	...	1
May	...	...	—
June	...	...	1
July	...	...	—
August	...	...	1
September	...	...	—
October	...	...	—
November	...	...	2
December	...	...	—
Total	...	...	<u>23</u>

These figures are, however, of no great significance because it is recognised that most cases of pneumonia due to influenza are never notified unless hospital admission is required. The number of notifications during the first quarter of the year bears little relationship to the large number of claims for sickness benefit which it must be assumed were largely due to influenzal illness.

DEATHS FROM INFLUENZA (REGISTRAR GENERAL'S FIGURES) 1966.

The deaths from influenza numbered 72, almost all in the older age groups. This is the highest figure since 1961 but is less than half the figure for the epidemic year of 1957.

Under 5 years	...	1
5-45 years	...	6
45-55 years	...	3
55-65 years	...	10
65-75 years	...	21
75-85 years	...	20
Over 85 years	...	11
Total	...	<u>72</u>

It is of course recognised that any outbreak of influenza has the effect of accelerating the deaths of many frail elderly persons who may have been expected to die from other conditions within a comparatively short time and the death rate is not a true indication of the seriousness of the epidemic.

The available figures are not an accurate indication of the true incidence of the disease in the community but it can be seen that there was a significant outbreak of influenza during the first quarter of 1966 which appears to have been the most significant since the major outbreak in 1957.

RESPIRATORY DISEASE OTHER THAN TUBERCULOSIS.

In 1966, 2,235 cases of primary pneumonia and 23 cases of influenzal pneumonia were notified, compared with 2,121 cases of pneumonia and 5 cases of influenzal pneumonia in 1965.

Eighty-nine per cent. of persons notified with primary pneumonia were treated in hospitals. The number and percentage of notifications of primary pneumonia treated in hospital are given in Table A.

TABLE A.
NOTIFICATIONS OF PRIMARY PNEUMONIA AND
NUMBER TREATED IN HOSPITAL.

Age in Years				Notifications of Primary Pneumonia	Number Treated in Hospital	Percentage Treated in Hospital
Under 1	...	...	...	519	474	91.3
1-4	...	...	...	376	354	94.1
5-44	...	...	...	287	260	90.6
45-64	...	...	...	383	336	87.7
65 and over	...	...	...	670	574	85.7
All Ages ...				2,235	1,998	89.4

Six of the 23 notifications of influenzal pneumonia were treated in hospital.

The age and sex distribution of the notifications of primary pneumonia are given in Table B. Twenty-three per cent. were under one year of age and 30 per cent. 65 years and over, that is, more than half were under 1 year of age or 65 years of age and over. Male notifications exceeded female notifications in the ratio of 1.328 to 1, the ratio in the age-group 1 to 64 years being 1.527 to 1.

TABLE B.

NOTIFICATIONS OF PRIMARY PNEUMONIA,
AGE AND SEX DISTRIBUTION.

Age in Years			Male Notifi- cations	Per- centage of Total	Female Notifi- cations	Per- centage of Total	Notifi- cations for both Sexes	Per- centage of Total
Under 1	...	...	301	23.6	218	22.7	519	23.2
1-4	...	...	223	17.5	153	15.9	376	16.8
5-44	...	...	166	13.0	121	12.6	287	12.9
45-64	...	...	243	19.1	140	14.6	383	17.1
65 and over	...	...	342	26.8	328	34.2	670	30.0
All Ages			1,275	100.0	960	100.0	2,235	100.0

The age and percentage distribution of the notifications of primary pneumonia for the years 1964 to 1966 are given in Table C, the percentage in the age-group 5-44 years having progressively fallen and in the age-group 65 years and over progressively risen.

TABLE C.

AGE AND PERCENTAGE DISTRIBUTION OF THE NOTIFICATIONS OF
PRIMARY PNEUMONIA FOR THE YEARS 1964, 1965 AND 1966.

			1964		1965		1966	
Age in Years			Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total
Under 1	...	...	459	20.6	520	24.5	519	23.2
1-4	...	...	354	15.9	341	16.1	376	16.8
5-44	...	...	477	21.5	339	16.0	287	12.9
45-64	...	...	447	20.1	379	17.9	383	17.1
65 and over	...	...	486	21.9	542	25.5	670	30.0
All Ages			2,223	100.0	2,121	100.0	2,235	100.0

The quarterly incidence of deaths, taken from the Registrar General's Quarterly Returns, is given in Table D. In the first quarter of the year there were 277 deaths recorded from primary pneumonia, 57 from influenza and 353 from bronchitis, the corresponding figures in 1965 being 176 deaths from primary pneumonia, no deaths from influenza and 326 deaths from bronchitis, the influenzal deaths and the increase in pneumonia deaths being associated with the influenzal epidemic in the first quarter of the year.

TABLE D.

QUARTERLY INCIDENCE OF *NOTIFICATIONS AND
†DEATHS OF PRIMARY PNEUMONIA AND INFLUENZAL PNEUMONIA
AND OF DEATHS FROM BRONCHITIS.

(* Departmental Data. † Registrar General's Quarterly Returns).

Period	Notifi- cations	Primary Pneumonia		Influenza		Bronchitis	
		% of Total	Deaths of Total	% of Total	Notifi- cations	Deaths	% of Total
1st Quarter	786	35.2	277	42.1	18	57	353
2nd Quarter	393	17.6	151	23.0	2	4	128
3rd Quarter	401	17.9	97	14.8	1	1	122
4th Quarter	655	29.3	132	20.1	2	8	200
	<u>2,235</u>	<u>100.0</u>	<u>657</u>	<u>100.0</u>	<u>23</u>	<u>803</u>	<u>7803</u>

The death rate per million for respiratory disease other than tuberculosis was 1,629, the corresponding rates for 1965, 1964 and 1963 being 1,450, 1,311 and 1,774. The high rate in 1963 was associated with the very cold weather of January and February of that year.

Table E gives the yearly incidence of deaths from pneumonia, bronchitis, influenza and "other respiratory diseases", excluding tuberculosis, from 1951 onwards.

TABLE E.

DEATHS FROM RESPIRATORY DISEASE OTHER THAN TUBERCULOSIS.
(REGISTRAR GENERAL'S ANNUAL REPORTS).

Year	Pneumonia (excluding Pneumonia of the newborn)	Bronchitis	Influenza	Other Respiratory Diseases	Totals
1951	558	814	191	117	1,680
1952	545	736	113	130	1,524
1953	408	641	70	96	1,215
1954	429	562	23	93	1,107
1955	539	721	39	91	1,390
1956	574	697	43	82	1,396
1957	587	628	174	72	1,461
1958	600	856	35	92	1,583
1959	693	943	89	78	1,803
1960	513	708	23	78	1,322
1961	645	762	75	86	1,568
1962	519	810	25	75	1,429
1963	729	946	52	99	1,826
1964	428	808	16	83	1,335
1965	533	814	17	87	1,451
1966	652	808	72	64	1,596

Table F gives the death rates for pneumonia and bronchitis per 100,000 of the estimated population, excluding institutional population, for the various public health divisions of the City. The figures are based on departmental data and the estimated death rates are highest in the Northern Division.

TABLE F.

DEATHS FROM PNEUMONIA AND BRONCHITIS
AND DEATH RATES PER 100,000 OF THE ESTIMATED POPULATION
FOR THE PUBLIC HEALTH DIVISIONS OF THE CITY.

(Based on Departmental data. Institutional Deaths have been excluded.)

Division	Pneumonia		Bronchitis		Death Rate per 100,000 of †Estimated Population	
	Number	Per Cent.	Number	Per Cent.	Pneumonia	Bronchitis
Eastern ...	111	21.1	176	23.3	49.1	77.8
Northern ...	139	26.4	164	21.8	75.9	89.6
Central ...	104	19.7	150	19.9	53.1	76.6
South-Eastern ...	97	18.4	156	20.7	46.7	75.2
South-Western ...	76	14.4	108	14.3	53.0	75.3
	<u>527*</u>	<u>100.0</u>	<u>754*</u>	<u>100.0</u>	<u>55.1</u>	<u>78.9</u>

* Institutional deaths not included.

† Institutional population not included.

The age and sex distribution of the deaths from pneumonia and bronchitis are given in Table G. Of the 652 deaths from pneumonia, 50.9 per cent. were male and 49.1 per cent. female and 67.6 per cent., about two-thirds of the deaths, were in the age-group 65 years and over. Of the 808 deaths from bronchitis 71 per cent. were male and 29 per cent. female, and 63.2 per cent. were in the age-group 65 years and over. In the age-group 45-64 years there were 262 deaths, 32.4 per cent. of the deaths from bronchitis, and of these, 202, 77.1 per cent. were male, and 60, 22.9 per cent. were female.

TABLE G.

DEATHS FROM PNEUMONIA AND BRONCHITIS—1966
AGE AND SEX DISTRIBUTION.

(Percentages of Column Totals given in brackets).
(Data from Registrar General's Annual Report).

Age in Years	Pneumonia			Bronchitis		
	Male	Female	Both Sexes	Male	Female	Both Sexes
Under 1 ...	48 (14.5)	39 (12.2)	87 (13.3)	7 (1.2)	6 (2.6)	13 (1.6)
1-4 ...	10 (3.0)	6 (1.9)	16 (2.5)	2 (0.4)	4 (1.7)	6 (0.8)
5-44 ...	6 (1.8)	10 (3.1)	16 (2.5)	7 (1.2)	9 (3.9)	16 (2.0)
45-64 ...	61 (18.4)	31 (9.7)	92 (14.1)	202 (35.2)	60 (25.6)	262 (32.4)
65 and over	207 (62.3)	234 (73.1)	441 (67.6)	356 (62.0)	155 (66.2)	511 (63.2)
All Ages ...	<u>332 (100.0)</u>	<u>320 (100.0)</u>	<u>652 (100.0)</u>	<u>574 (100.0)</u>	<u>234 (100.0)</u>	<u>808 (100.0)</u>

Deaths from pneumonia, influenza and bronchitis formed 12·3 per cent. of the deaths from all causes, rather more, 14·4 per cent. of male deaths and, rather less, 10 per cent. of female deaths.

TABLE H.

PROPORTIONATE MORTALITY PER CENT. OF *DEATHS FROM ALL CAUSES,
OF *DEATHS FROM PNEUMONIA, INFLUENZA AND BRONCHITIS.

Columns (1), (4), (7)—Deaths from All Causes
(2), (5), (8)—Deaths from Pneumonia, Influenza and Bronchitis
(3), (6), (9)—Proportionate Mortality Per Cent.

	MALE			FEMALE			BOTH SEXES		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Age in years—</i>									
Under 1 ...	335	56	16·7	263	45	17·1	598	101	16·9
1-4 ...	48	12	25·0	32	10	31·3	80	22	27·5
5-44 ...	426	15	3·5	270	23	8·5	696	38	5·5
45-64 ...	2,216	271	12·2	1,257	96	7·6	3,473	367	10·6
65 and over ...	3,523	591	16·8	4,071	413	10·1	7,594	1,004	13·2
All Ages ...	6,548	945	14·4	5,893	587	10·0	12,441	1,532	12·3
All Ages, 1965	6,623	865	13·1	6,138	499	8·1	12,761	1,364	10·9

*Data from Registrar General's Annual Report.

Table I gives the death rates from pneumonia and bronchitis for Glasgow and other cities in Scotland and England for the years 1963, 1964 and 1965. The rates for Glasgow, while above the Scottish rates, compare favourably, on the whole, with those in England.

TABLE I.

DEATH-RATES PER 100,000 OF THE POPULATION FOR
PNEUMONIA AND BRONCHITIS FOR SCOTLAND,
THE SCOTTISH AND CERTAIN ENGLISH CITIES.

	Pneumonia			Bronchitis		
	Death Rate per 100,000			Death Rate per 100,000		
	1963	1964	1965	1963	1964	1965
*Scotland ...	57·4	33·4	39·4	58·6	51·2	54·8
*Aberdeen ...	58·6	28·1	42·3	40·3	50·8	42·3
*Dundee ...	70·6	40·5	49·6	58·1	53·4	71·2
*Edinburgh ...	70·3	42·0	50·8	54·4	58·3	60·1
*Glasgow ...	70·3	42·0	53·2	91·3	79·3	81·3
†Birmingham ...	82·5	72·1	72·7	77·7	72·3	74·4
†Liverpool ...	108·5	105·0	91·5	101·6	74·1	75·8
†Manchester ...	70·6	54·5	57·6	131·4	98·4	104·3
†Leeds ...	92·6	78·5	71·5	102·6	81·0	88·2
†Salford ...	115·4	70·5	78·2	141·6	117·1	118·7
†Oldham ...	78·8	71·0	98·7	148·8	109·2	101·4

These figures are based on data from—

* Registrar General's Annual Reports for Scotland.

† Registrar General (England and Wales) Statistical Reviews.

TUBERCULOSIS.

THE GENERAL TREND OF TUBERCULOSIS.

Incidence.—The notification figures which follow show a continued downward trend in the incidence of tuberculosis. There were 634 pulmonary cases notified in 1966 compared with 721 in 1965 and 814 in 1964. The corresponding figures for non-pulmonary cases were 102 in 1966, 104 in 1965 and 135 in 1964. The incidence over the past thirty years is shown :—

		Pulmonary	Non-Pulmonary	Total
1935-39 (Average)		1,650	657	2,307
1940-44	do.	2,367	690	3,057
1945-49	do.	2,674	468	3,231
1950-54	do.	2,297	312	2,609
1955	... ..	2,181	278	2,459
1956	... ..	2,024	193	2,217
1957	... ..	3,925	172	4,097
1958	... ..	1,340	167	1,507
1959	... ..	1,159	120	1,279
1960	... ..	1,092	109	1,201
1961	... ..	1,021	137	1,158
1962	... ..	927	117	1,044
1963	... ..	863	116	979
1964	... ..	814	135	949
1965	... ..	721	104	825
1966	... ..	634	102	736

With 87 fewer pulmonary cases there was a reduction of 12·1 per cent. on the 1965 figure. In the two previous years the corresponding reductions were 11·4 per cent. and 5·7 per cent. From this viewpoint progress was satisfactory.

The incidence of non-pulmonary disease shows little change. In this category completeness of notification is doubtful. Notification here is largely dependent on junior hospital doctors in surgical units and rapid change-over in staff inevitably results in omissions. Information from the reference laboratory at Mearns Kirk is helpful in bringing unnotified cases to the attention of the Department. Notification of pulmonary disease comes mostly from the chest clinics where there

is continuity. Hence this notification is more complete and may even exaggerate the incidence. For example, certain young persons who are rightly given anti-tuberculosis drug treatment may be notified although such action would not have been taken in the past. The necessity for treatment and the notification must be left to the individual clinician who looks after the patient.

The following table shows the age and sex distribution of the cases notified in 1966 with the corresponding 1965 figures alongside for comparison :—

Age Groups	Pulmonary				Non-Pulmonary			
	Males		Females		Males		Females	
	1966	1965	1966	1965	1966	1965	1966	1965
— 5 ...	8	10	7	9	1	1	—	1
—15 ...	9	14	11	10	2	7	4	3
—25 ...	48	43	39	35	12	12	13	11
—35 ...	42	60	43	42	8	6	12	19
—45 ...	60	66	41	50	6	7	13	9
—55 ...	70	95	23	32	1	3	4	8
—65 ...	104	130	22	25	3	4	10	3
+65 ...	87	78	20	22	5	3	8	7
	428	496	206	225	38	43	64	61

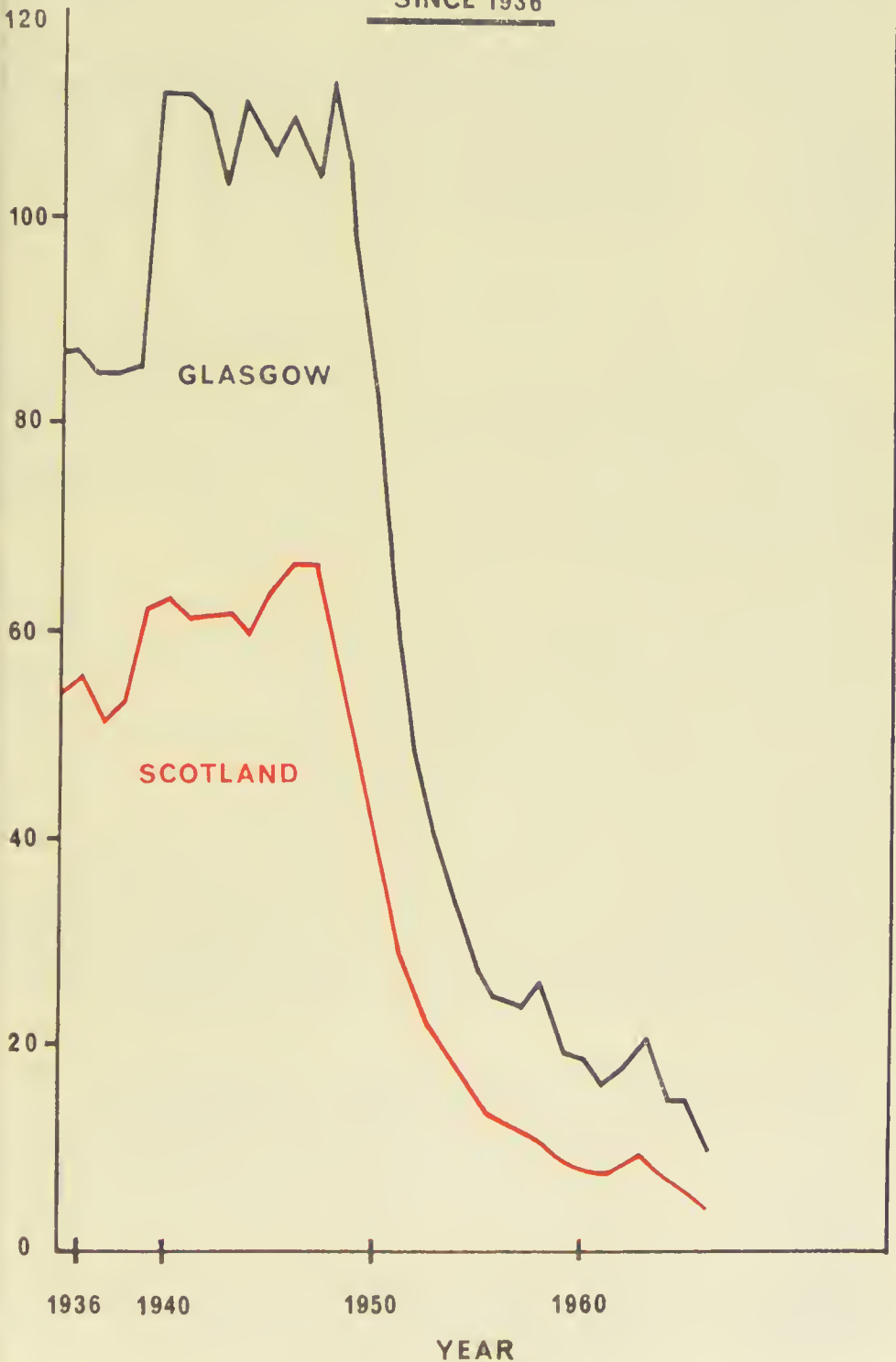
There were 68 fewer male cases of pulmonary disease and only 19 fewer females. It is good to note the great improvement in older working males between 45 and 65 years of age. This section of the population which has been a cause of concern in recent years now shows a drop in incidence from 225 cases in 1965 to 174 cases in 1966. The 1965 figure was augmented by the fourteen new cases discovered in the July screening campaign. This campaign and the continuing work of the Mass Radiography Unit can take some credit for the improvement in adult males, but this improvement is greater than could be expected from the preventive work done.

A disturbing feature of the age and sex incidence is the increase although small, in both sexes between 15 years and 25 years of age. Successful control at this age, attributed partly to B.C.G. Vaccination, has come to be expected. It is to be hoped that the downward trend will be resumed.

PULMONARY TUBERCULOSIS
GLASGOW and SCOTLAND
Deathrates per 100,000

Rate per
100,000
120

SINCE 1936



PULMONARY TUBERCULOSIS.

Incidence.—The case rate per 100,000 in Glasgow is shown for certain years along with the comparative incidence in other large towns in Scotland and England.

PULMONARY TUBERCULOSIS : GLASGOW AND OTHER LARGE TOWNS.

		1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Glasgow ...	...	189	367	126	109	103	97	89	84	80	72	65
Edinburgh ...	...	129	90	148	59	55	56	47	48	37	39	40
Aberdeen ...	...	123	171	52	73	48	46	34	26	26	30	32
Dundee ...	...	140	148	252	135	57	71	63	67	49	50	35
Liverpool ...	...	131	133	104	215	58	54	59	53	37	34	33
Manchester ...	...	86	88	78	71	59	58	59	47	49	48	44
Birmingham ...	...	93	77	84	64	71	64	65	56	57	51	53

It will be seen that some cities, including Glasgow, show an improvement whereas others do not. In none of the cities mentioned can it yet be said that tuberculosis is well-controlled and no further improvement can be expected. This position has been reached in certain other countries, for example, Denmark where tuberculosis is a rare disease. The figures suggest that the lower the incidence the more difficult it becomes to maintain an improvement.

Mortality.—There were 95 deaths from pulmonary tuberculosis in 1966 compared with 140 in 1965. This is a remarkable improvement, and although no magic attaches to the figure 100 it is good to see the deaths in the city drop below this figure for the first time. The corresponding death rates per 100,000 of population were 9·6 in 1966 and 14·0 in 1965. Seventy-one of the 95 deaths were in males and of these 50 were in males over 55 years of age. Perhaps the legacy from the past of old chronic cases is beginning to disappear. More ready acceptance of improved treatment should result in a high proportion of cures.

The rates shown below have been computed on the Registrar General's standard. Especially in the smaller towns the rates are now so low as to be influenced merely by chance fluctuation.

PULMONARY TUBERCULOSIS : GLASGOW AND OTHER LARGE TOWNS.
DEATH RATES PER 100,000 — 1956-1966.

		1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Glasgow ...	...	25	24	26	20	19	18	18	21	14	14	10
Edinburgh ...	...	9	7	6	4	5	3	3	3	2	3	2
Aberdeen ...	...	10	5	7	6	5	5	2	4	1	3	2
Dundee ...	...	14	9	10	7	5	6	3	7	4	2	2
Liverpool ...	...	18	16	14	14	11	11	10	7	5	6	6
Manchester ...	...	15	14	10	12	12	8	11	8	8	7	7
Birmingham ...	...	14	12	13	9	7	7	7	7	5	4	4

NON-PULMONARY AND DISSEMINATED TUBERCULOSIS.

Incidence.—There were 102 cases of non-pulmonary tuberculosis in 1966 compared with 104 in 1965 and 135 in 1964. The rate remains the same in 1966 at 10 per 100,000 as it was in 1965. Included in the 102 were three cases of tuberculous meningitis. Ten years ago when there was one case of meningitis in every eight cases of non-pulmonary disease it was of interest to state this as a ratio. Now it is a matter of chance whether two or three cases of meningitis occur in the year and the ratio has no significance. The table of ratios has therefore been omitted.

There was no infant case of meningitis in 1966. Notifications since 1956 are recorded :—

TUBERCULOUS MENINGITIS : NOTIFICATIONS 1956 TO 1966.

			1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
<i>Males—</i>													
0-1	...	...	1	1	1	—	—	1	—	—	—	—	—
1-5	...	...	3	6	1	2	1	1	2	2	—	—	1
Over 5	...	...	2	3	8	2	1	1	3	2	3	2	—
<i>Females—</i>													
0-1	...	...	1	—	—	—	—	—	—	—	—	—	—
1-5	...	...	4	2	1	—	2	—	—	2	—	—	—
Over 5	...	...	11	11	4	5	2	4	3	5	1	—	2
			—	—	—	—	—	—	—	—	—	—	—
			22	23	15	9	6	7	8	11	4	2	3
			==	==	==	==	==	==	==	==	==	==	==

Mortality.—In 1966 there were 13 deaths from non-pulmonary tuberculosis compared with eight in 1965. Death rates per 100,000 were 1·3 in 1966 and 0·8 in 1965. Although numbers are small, the increase appears large and is therefore disappointing.

Intimation of Primary Tuberculosis.—Intimations of primary tuberculosis in children, which have been decreasing for a few years, showed a marked increase from six in 1965 to 24 in 1966, comprising 13 boys and 11 girls. The notifications in children showed a small decrease, from 19 to 15, in children under five years and do not balance out the increase in intimations. Sometimes intimations are linked to a large reaction to a tuberculin test and especially if a family contact history is also found. It is therefore not entirely certain that child incidence has increased as much as the figures suggest.

GLASGOW—CASES OF PULMONARY TUBERCULOSIS NOTIFIED AND DEATH RATE PER MILLION IN EACH MUNICIPAL WARD DURING 1966 AND 1965

Ward No.	Pulmonary Cases				Death-Rate*	
	Males		Females		Both Sexes	
	1966	1965	1966	1965	1966	1965
1 Shettleston and Tollcross	23	22	12	3	119	308
2 Parkhead	8	5	4	5	196	382
3 Dalmarnock	9	16	5	10	157	186
4 Calton	9	7	4	6	320	60
5 Mile-End	8	16	4	5	209	313
6 Dennistoun	11	7	2	6	46	313
7 Provan	22	27	17	11	98	49
8 Cowlairs	11	6	1	3	154	149
9 Springburn	11	14	5	8	128	63
10 Townhead	8	14	5	10	100	315
11 Exchange	9	10	2	3	—	663
12 Anderston	13	13	6	9	70	130
13 Park	15	10	4	8	63	—
14 Cowcaddens	2	5	3	5	228	347
15 Woodside	4	7	1	—	—	140
16 Ruchill	21	15	14	10	238	162
17 North Kelvin	5	10	4	4	199	145
18 Maryhill	8	12	4	6	84	172
19 Kelvinside	4	6	1	4	50	51
20 Partick (East)	12	5	7	3	—	54
21 Partick (West)	6	7	4	4	—	162
22 Whiteinch	4	10	1	4	—	—
23 Yoker	10	9	11	6	69	142
24 Knightswood	24	16	15	11	57	188
25 Hutchesontown	7	6	1	4	164	442
26 Gorbals	14	15	2	6	175	323
27 Kingston	8	8	3	6	—	124
28 Kinning Park	11	16	7	4	262	—
29 Govan	10	11	6	8	95	90
30 Fairfield	7	6	2	2	225	214
31 Craigton	6	10	3	1	143	142
32 Pollokshields	7	14	7	6	57	—
33 Camphill	9	9	1	5	219	54
34 Pollokshaws	22	33	8	11	84	63
35 Govanhill	8	9	—	6	89	44
36 Langside	8	7	9	3	40	118
37 Cathcart	18	26	19	16	62	96
Institutions	35	57	2	3	—	—
Harbour	1	—	—	—	—	—
Total for City ...	428	496	206	225	116	164

* M.O.H. figures.

A study of this table over the years will show how the number of cases and deaths can vary from year to year in smaller populations. Shettleston, Ruchill and Knightswood moved against the City trend with increased numbers of cases. In Pollokshaws cases fell from 44 to 30. The high death rate in Calton ward was accounted for by five deaths but in the more populous Ruchill ward there were 10. Finally, in the adjacent wards of Partick (East), Partick (West) and Whiteinch, no deaths were recorded.

B.C.G. VACCINATION.

The total number of vaccinations performed showed a considerable decrease from 27,312 in 1965 to 25,425 in 1966. There was a drop in the number of contacts vaccinated from 738 to 598. This is to be expected because of the drop in notifications and may continue. School vaccinations also fell from 13,549 to 13,068 and this may be explained by the increasing proportion of 13-year-olds who have previously been vaccinated. The largest deficiency, however, was in the infant vaccinations which decreased from 12,794 to 11,549. This is regretted and an attempt has since been made to find a remedy.

Schools Campaign.—With the usual good co-operation of the teaching staffs a successful vaccination campaign was carried through between October and December.

Vaccinations of 13-year-olds was done in 110 schools. Consent forms issued to parents were 74 fewer than in 1965 at 15,655 and of these, 15,133 consents were obtained. This represents a 96·7 per cent. success, fractionally better than in the previous year. The Health Visitors went to 618 homes from which consent forms had not been returned and were able to obtain 392 of these. Where there is a large deficiency of consent forms returned to the school the help of the headmaster is enlisted and this has proved worthwhile.

There was a loss of 5·3 per cent. of the children due to absence from school, and 14,333 Mantoux tests were read of which 10,888 were negative reactors. The final number of vaccinations given was 10,879.

The proportion of positive reactors to the Mantoux Test (P.P.D. : 10 Tuberculin Units) again increased. In 1964 16·5 per cent. of the scholars tested were positive. In 1965 19·7 per cent. were positive. These were children born in 1952 when 2,085 newborn infants were vaccinated. This was discussed at some length in last year's report. In 1966 24·0 per cent. were positive. These children were born in 1953 when 2,732 newborn infants were vaccinated, equal to 13·5 per cent. of the babies born in that year. Apart from infant vaccination, many children are given B.C.G. at a later age; for example, in 1957 over four thousand older children were vaccinated.

Large Positive Reactors.—Of the 3,445 positive reactors found in the main school campaign, 335 had large reactions of the order of 25mm. in diameter or greater. Of these, 57 had an X-ray abnormality most having healed calcified lesions. Thirty of these children had been notified

or intimated prior to 1966. Four new cases, considered active, were found as a result of these investigations. These four are included in the 121 who were treated with anti-tuberculous drugs.

Using these large reactors as index cases, family investigation showed that there was a family history of tuberculosis in 104 cases. More importantly, a further four new cases were found and treated among the family contacts. Thus a total of eight new cases were brought to light by these investigations.

Fourteen-Year-Old Survey.—A small survey of tuberculin testing was carried out on 14-year-olds in five schools. One hundred and thirty-six scholars who were Mantoux negative in 1965 and who received B.C.G. vaccination were tested and 119 were found to be Mantoux positive. The remaining 17 children were Mantoux negative in 1966, equal to 12·5 per cent. of those tested. The majority of these negative reactors had good vaccination scars and evidence is now being produced which suggests that a negative tuberculin test does not rule out adequate protection.

British B.C.G. has been tested on school children in England as to its effectiveness in producing tuberculin (or Mantoux) conversion. The tests show a conversion rate for various batches of around 95 per cent. The difference between the 5 per cent. negatives in these tests and the 12·5 per cent. found in Glasgow may be partly explained by the fact that the tests in England were about five times as strong. If one child in eight (Glasgow) or even one in twenty (England) remains tuberculin negative after vaccination, it is comforting to think that B.C.G. is still giving protection.

Twenty-five of these 136 scholars given B.C.G. in 1965 and retested in 1966 had a history of previous B.C.G. in infancy, but in only 11 of these 25 were record cards found.

Also retested in 1966 were 42 scholars aged 14 who were Mantoux positive in 1965 and therefore not vaccinated. Forty of these were still positive but two had reverted to the negative state. The numbers are rather small but findings elsewhere have shown that reversion in teenagers is not uncommon. It is obviously impracticable to maintain a tuberculin positive state in the youthful population and it may be that B.C.G. would be best given at as young an age as possible, in infancy or at school entry.

A statistical account of the 1966 campaign is now set out.

SCHOOLS B.C.G. CAMPAIGN—1966.

1. PUBLIC RESPONSE—PARENTAL CONSENT TO VACCINATION.

		Schools	Pupils	Consents	% Response
Public Schools	...	104	15,308	14,796	96·7
Private Schools	...	6	347	337	97·1
Total	...	<u>110</u>	<u>15,655</u>	<u>15,133</u>	<u>96·7</u>

2. LOSS DUE TO ABSENCE FROM SCHOOL.

	(1) Consents	No. Absent 1st Visit	% of (1)	No. Tested	No. Absent 2nd Visit	% of (1)	Total No. Absent	% of (1)	No. of Tests Read
Public Schools	14,796	612	4·1	14,184	179	1·2	791	5·3	14,005
Private Schools	337	7	2·1	330	2	0·6	9	2·7	328
Total	<u>15,133</u>	<u>619</u>	<u>4·1</u>	<u>14,514</u>	<u>181</u>	<u>1·2</u>	<u>800</u>	<u>5·3</u>	<u>14,333</u>

3. RESULTS OF MANTOUX TESTS.

MALE—

	Tests	Positive	Per Cent.	Negative	Per Cent.
Public Schools	... 7,147	1,753	24·5	5,394	75·5
Private Schools	... 141	9	6·4	132	93·6
Total	... <u>7,288</u>	<u>1,762</u>	<u>24·2</u>	<u>5,526</u>	<u>75·8</u>

FEMALE—

Public Schools	... 6,858	1,659	24·2	5,199	75·8
Private Schools	... 187	24	12·8	163	87·2
Total	... <u>7,045</u>	<u>1,683</u>	<u>23·9</u>	<u>5,362</u>	<u>76·1</u>
All Results	... <u>14,333</u>	<u>3,445</u>	<u>24·0</u>	<u>10,888</u>	<u>76·0</u>

4. B.C.G. VACCINATION.

MALE—

	Negative Reactors	Not Vaccinated	Per Cent.	Vaccinated
Public Schools	... 5,394	5	0·9	5,389
Private Schools	... 132	—	—	132
Total	... <u>5,526</u>	<u>5</u>	<u>0·9</u>	<u>5,521</u>

FEMALE—

Public Schools	... 5,199	4	0·8	5,195
Private Schools	... 163	—	—	163
Total	... <u>5,362</u>	<u>4</u>	<u>0·7</u>	<u>5,358</u>
Both Sexes	... <u>10,888</u>	<u>9</u>	<u>0·8</u>	<u>10,879</u>

Routine Vaccination Scheme.—The number of contacts vaccinated is falling but the coverage is still good. Vaccination is almost entirely done in the clinics. It will be seen that two children were vaccinated in Millbrae. It may still be useful in a very few cases to isolate a baby from an infectious mother, but the work of the preventoria is now a matter of history.

The addition of 25,425 vaccinations in 1966 now brings the cumulative total of B.C.G. vaccinations in Glasgow to 319,366.

B.C.G. VACCINATIONS — GLASGOW, 1950/1966.

Group	Centre		1950/61	1962	1963	1964	1965	1966	Total
Indoor	Moffat Street	... ..	886	3	6	—	—	—	895
Contacts	Carnbooth	... ..	554	6	5	2	3	—	570
	Millbrae	... ..	640	32	19	10	15	2	718
N.B.									
Infants	Millbrae	... ..	1,000	9	2	11	16	—	1,038
Total			3,080	50	32	23	34	2	3,221
Outdoor	Health & Welfare Dept.		16,745	1,008	999	632	738	598	20,720
Contacts	R.H.S.C.	... ..	1,009	—	—	—	—	—	1,009
Total			17,754	1,008	999	632	738	598	21,729
Nurses	Hospitals	... ..	1,985	174	89	71	119	121	2,559
	Langside College Trainees		157	6	14	16	45	30	268
	Logan and Johnston Trainees	... ..	166	28	30	23	33	47	327
	H.V. Trainees	... ..	18	—	—	—	—	—	18
Total			2,326	208	133	110	197	198	3,172
Students	University	... ..	730	36	44	32	—	10	852
	Others	... ..	93	—	—	—	—	—	93
Total			823	36	44	32	—	10	945
Total Primary Groups			23,983	1,302	1,208	797	969	808	29,067

Group	Centre	1950/61	1962	1963	1964	1965	1966	Total
N.B.	Maternity Hospital	... 20,347	2,890	3,040	3,153	2,899	1,721	34,050
Infants	Robroyston Hospital	... 12,217	1,658	1,677	1,149	1,769	1,819	20,289
	Stobhill Hospital	... 11,053	1,361	1,315	1,266	1,591	1,879	18,465
	Western District Hosp.	7,009	1,361	1,278	1,289	828	—	11,765
	Southern General Hosp.	3,450	573	723	685	474	275	6,180
	Eastern District Hosp.	2,681	488	479	641	533	326	5,148
	Redlands Hospital	... 2,243	485	340	568	726	1,006	5,368
	Maternity Hospital— Ross Annexe	... 6,439	1,720	1,838	1,553	1,531	1,691	14,772
	Belvidere Hospital	... —	485	749	585	783	929	3,531
	Queen Mother's Hospital	—	—	—	1,424	1,660	1,903	4,987
Total		... 65,439	11,021	11,439	12,313	12,794	11,549	124,555
Scholars	Schools	... 86,209	12,111	12,007	11,723	11,542	10,879	144,471
Others	Various	... 10,039	2,400	2,208	2,430	2,007	2,189	21,273
Total		... 96,248	14,511	14,215	14,153	13,549	13,068	165,744
Total Secondary Groups		161,687	25,532	25,654	26,466	26,343	24,617	290,299
Total All Groups		185,670	26,834	26,862	27,263	27,312	25,425	319,366

Cumulative Total—319,366

X-RAY SECTION.

In July, 1965, there was the survey of men over 45 years and following this the X-ray plant gave a lot of trouble over a period of months. 1966 has seen a return to a more normal routine. Although there have been occasional breakdowns the apparatus has functioned fairly well. There have been no changes of staff and a high standard of X-ray work has been maintained.

After subtracting the numbers X-rayed during the July campaign the volume of other work undertaken remained similar to that done in 1965. There was an increase in the number of superannuation candidates examined, offset by a decrease in school teachers and contacts.

The following table shows the recall rates :—

	Males	Females	Total
Miniatures	3,814	4,636	8,450
Recalls	203	156	359
Recall Rate	5.3%	3.4%	4.2%

The corresponding rates in 1965 were 6.0 per cent. (male), 5.4 per cent. (female) and 5.8 per cent. (total). These 1965 rates were too high due largely to poor miniature films towards the end of the year.

The 8,450 miniature films taken in 1966 are classified below.

MINIATURE FILMS, 1966.

	Males	Females	Total
1. Contacts, New	415	528	943
2. Contacts, Return	19	37	56
3. Superannuation	1,650	855	2,505
4. Sick Pay	282	793	1,075
5. School Children	1	—	1
6. Special Surveys	99	206	305
7. Nationalised Services	2	—	2
8. Entrants to Homes	71	128	199
9. Other Local Authorities	33	7	40
10. Miscellaneous	296	961	1,257
11. School Teachers	598	1,094	1,692
12. Transport	348	27	375
	<u>3,814</u>	<u>4,636</u>	<u>8,450</u>

The 555 full-size films consisted of 359 recalls and 196 primary full-size films. The corresponding figures for 1965 were a total of 925 full-size films made up of 631 recalls and 294 primary. The 1966 figures show a considerable economy in the purchase of large films.

The findings for 1966 are classified as follows :—

FULL-SIZE FILMS, 1966.

Groups	Phthisis			Root Lesions	Non-Pulm. Lesions	Neo-plasm	N.A.D.	Total
	Active	Inactive	Pleurisy					
MALE—								
1. Contacts, New ...	8	6	—	10	3	—	14	41
2. Contacts, Return ...	—	—	—	1	—	—	—	1
3. Superannuation ...	7	29	12	4	11	—	29	92
4. Sick Pay	3	15	5	1	3	—	5	32
5. School Children ...	—	—	—	—	—	—	—	—
6. Special Surveys ...	—	3	1	—	—	—	1	5
7. Nationalised Services	—	—	—	—	—	—	—	—
8. Entrants to Homes	7	11	7	—	—	—	10	35
9. Other Local Authorities ...	—	—	—	—	1	—	1	2
10. Miscellaneous ...	3	15	7	—	10	—	49	84
11. School Teachers ...	1	9	—	—	1	1	7	19
12. Transport	3	4	—	1	1	—	7	16
	32	92	32	17	30	1	123	327

FULL-SIZED FILMS, 1966—*Continued*

FEMALE—	Groups	Phthisis			Root Lesions	Non-Pulm. Lesions	Neo-plasim.	N.A.D.	Total
		Active	Inactive	Pleurisy					
	1. Contacts, New ...	8	16	5	5	2	—	13	49
	2. Contacts, Return ...	1	3	2	—	—	—	1	7
	3. Superannuation ...	3	14	—	—	4	—	6	27
	4. Sick Pay ...	5	12	1	1	3	—	8	30
	5. School Children ...	—	—	—	—	—	—	—	—
	6. Special Surveys ...	—	1	—	—	—	—	2	3
	7. Nationalised Services	—	—	—	—	—	—	—	—
	8. Entrants to Homes	2	7	—	1	8	—	19	37
	9. Other Local Authorities ...	—	—	—	—	—	—	—	—
	10. Miscellaneous ...	6	13	4	2	5	—	19	49
	11. School Teachers ...	3	9	—	—	2	—	11	25
	12. Transport ...	—	—	—	—	—	—	1	1
		<u>28</u>	<u>75</u>	<u>12</u>	<u>9</u>	<u>24</u>	<u>—</u>	<u>80</u>	<u>228</u>

There were 60 patients in whom a diagnosis of active pulmonary tuberculosis was suggested compared with 91 in the previous year. Of the latter total, 27 were discovered in the July survey so that there is little change in the number of cases discovered in the routine work.

In 1965 eight cases were diagnosed as probable lung cancer including four in the survey. In 1966 this diagnosis was only suggested in one patient, a middle-aged man.

VENEREAL DISEASE.

The number of new patients attending the Venereal Diseases Clinics in Glasgow continued to rise in 1966; 5,492 compared with 5,089 in 1965. Once more there was a drop in the numbers on transfer (102), but the number carried over from 1965 increased as a result of our policy of maintaining patients on surveillance for three months from risk of infection so that the total number of patients dealt with rose to 7,139. Figures for the admission and disposal of patients from 1961 to 1966 are set out in Table I which shows the various trends. Again the large number of patients carried over to 1967 reflects the rather large number of patients attending during the final quarter of the year.

Table II sets out the number of new patients by sex and diagnosis over the past six years. In 1966 the increase of both sexes has been about even. With regard to males the number of those attending with gonorrhoea is slightly above that of 1965, and has halted the decline noted over the past few years. The increase in numbers suffering from non-specific urethritis continues as have the numbers of those suffering

from other venereal infections, more than balancing the decrease in numbers of patients with no venereal disease. The increase in the number of females with gonorrhoea and trichomonas infections continues to rise at a marked rate while the numbers attending with other venereal infections has almost doubled, and those with no venereal disease remains static.

NON-SPECIFIC URETHRITIS.

The increase in the numbers of patients attending with non-specific urethritis continues (807 in 1966) of whom 14 (1.7 per cent.) developed Reiter's Disease. It may well be that the numbers of non-specific urethritis will equal that of gonorrhoea in males in the not too distant future, as is found elsewhere.

TRICHOMONAS INFECTIONS.

Twenty-three male patients were found to be suffering from trichomonas infections in 1966 mainly as a result of routine culture being carried out on all cases of urethritis searching for these organisms. The numbers of females with trichomoniasis has continued to rise (410 in 1966); once more the diagnosis is made most frequently from the cervical smears taken for exfoliative cytology.

OTHER VENEREAL INFECTIONS.

The numbers of male patients (926) show a rise reflecting the conditions for which patients are coming of their own accord to seek aid following risks of infection. Balanitis remains the main clinical entity within this group. No cases of chancroid were found in 1966 but once again two cases of lymphogranuloma venereum were treated. During the year 87 men and nine women were treated for phthirus pubis infestation and 35 men and two women for scabies. These cases are not from families. They are all in single persons, the disease being transmitted by cohabiting, if only for a night or two, with an infected person. A number of women have been found to be suffering from vaginal thrush, but as yet we have found no correlation between this and taking a birth control pill as has been reported elsewhere.

NON-VENEREAL CONDITIONS.

The number of male patients in this category has remained steady and consists mainly of men who have run risks of infection and have become anxious about their folly and come to us for reassurance. The

number of babies for adoption within this group continues to rise ; in 1966, 209 males and 204 females were tested, reflecting the rise in the illegitimacy rate.

Once more under non-venereal conditions discovered at the clinic are included those female patients who had cervical exfoliative cytology and who were found to be in need of gynaecological treatment. Five hundred and forty-one smears were taken from 473 women and because of abnormalities found ten were referred to gynaecologists. Three women have so far refused the offer of appointments to be seen by gynaecologists or have failed to keep appointments made. Two were referred to hospitals out of the area. The results of one were satisfactory. The other is still awaited. Of five patients referred to local gynaecologists three were found to have carcinoma *in situ* and two had evidence of dysplasia.

SYPHILIS.

The type of syphilis diagnosed in new patients from 1961 to 1966 is set out in Table III. There has been a sharp rise in the number of male and female patients with contagious syphilis which was in part due to the shipping strike when a number of seamen returned home and infected their wives and consorts before being diagnosed. Of the fifteen male cases seven infections were acquired locally, two by homosexuals, while of the eight infections acquired elsewhere six were imported by seamen from abroad. Of the 10 females who all acquired their infection locally, four were wives infected by their husbands. There was a drop in the numbers of patients with late acquired syphilis referred to this Department, but still an appreciable number are being referred to us. No case of congenital syphilis was seen in children. All ten cases diagnosed in 1966 were in adults.

ANTE-NATAL BLOOD TESTS.

There was a fall in the number of ante-natal serological tests for syphilis carried out in Glasgow in 1966 ; 22,577 as compared with 29,226 in 1965, but once more all sera giving doubtful or positive results to the various non-specific tests were subjected to specific tests.

During 1966 the City Laboratory tested 6,255 sera from the ante-natal clinics, ten (0.16 per cent.) gave positive results to non-specific tests of which three were confirmed by the specific tests. During the same period 3,792 sera from ante-natal patients were referred by general practitioners ; six (0.16 per cent.) gave positive non-specific results one of which was confirmed.

The other laboratories in Glasgow carried out tests on a further 12,530 ante-natal sera, 147 (1.17 per cent.) gave positive non-specific results 16 of which were confirmed by specific tests. In all 20 (12.3 per cent.) of the 163 positive or doubtful non-specific results were confirmed giving an overall incidence of syphilis among these ante-natal patients of 0.089 per cent.

This is a marked rise as compared with the previous two years; 0.058 per cent. in 1965 and 0.026 per cent. in 1964. The reasons for this are not obvious, it may be that fewer ante-natal patients are being tested, and the multipara who have been found to have syphilis previously are being re-tested in each subsequent pregnancy, but one must not overlook the possibility that this reflects an increase in contagious syphilis in the area.

GONORRHOEA.

Fourteen cases of gonococcal ophthalmia were referred to the Department of Venereal Diseases in 1966. The numbers of babies with gonococcal ophthalmia continues to increase and it is apparent that there is a lack in the ante-natal care of their mothers. This venereal infection is now numerically more serious than the possibility of a mother transmitting syphilis to her child, especially when one takes into consideration that of the twenty mothers discovered to have positive serological tests during pregnancy in 1966 a number were already under our care. Greater vigilance is needed in the ante-natal care of women, especially in the later months to exclude gonorrhoea as a cause of vaginal discharge. One child was referred with gonococcal vulvo-vaginitis in 1966.

The numbers by age groups of male and female patients with sexually transmitted gonorrhoea attending from 1961 to 1966 are set out in Table IV. In 1966 there was an increase of the numbers of male patients mainly in the younger age groups, and this is in line with findings in the rest of the country where the downward trend appears to have been halted. With regard to females the rise in numbers has continued and in 1966 the age group most affected was that aged 25-34 which reflects an increase in the number of overtly promiscuous women that we had to treat. The figures in Table IV indicate the cases of gonorrhoea rather than patients so that in actual fact 920 males attended during 1966 with 1,054 infections, 304 women had 330 infections.

SENSITIVITY OF GONOCOCCI TO ANTIBIOTICS.

During 1966 the City Laboratory reported on the sensitivity to Streptomycin, Sulphonamides and Tetracycline of 1,127 strains of gonococci. The organisms were sensitive to all these antibiotics on 834 (74.2 per cent.) occasions. The *in vitro* resistance to these antibiotics is set out in Table V by quarters. Resistance to Streptomycin (23.1 per cent.) was slightly lower than 1965 (28.8 per cent.) while that to Sulphonamides remained the same (2.3 per cent.). Sensitivity tests to Kanamycin were carried out in the final two quarters of the year and resistance was found in 5.7 per cent. using a five microgram disc. Once more there was very little resistance noted to Tetracycline (0.2 per cent.). Penicillin by injection remains the drug of choice in the treatment of gonorrhoea unless there are contra-indications to its use in which case Kanamycin, also by injection, will probably prove to be the best drug to hold in reserve. Sensitivity to Penicillin is now being carried out on a quantitative basis and is not included in the above Table. Fifty per cent. of strains were sensitive to 0.03 micrograms of Penicillin G per ml. Only nine per cent. needed a concentration of 0.3 micrograms or more per ml.

ATTENDANCE OF SEAMEN AT VENEREAL DISEASES CLINICS

During 1966, 467 seamen attended Glasgow Clinics, a small increase on 1965 (457). The vast majority attended for reassurance, a number admitted to have been treated on board ship in recent months. The amount of contagious syphilis and gonorrhoea found in seamen as compared with the total males in Glasgow is set out in Table VI. Seven seamen were found to be suffering from contagious syphilis only one having acquired the condition locally. These infections account for almost half the contagious syphilis found in males during the year. The numbers of seamen attending with gonorrhoea has continued to drop since 1962 and again the incidence of gonorrhoea in seamen (17.8 per cent.) was lower than for the total male patients (27.5 per cent.).

CONTACT TRACING.

Of the 1,069 males with infectious venereal disease eight came as contacts, some of them of females already attending. Interrogation of the other 1,055 concerning their sexual contacts resulted in information that could be followed up in 357 (33.8 per cent.), 24 per cent. in 1965. This reflects an improvement in interrogation facilities in the male clinics. Seventeen contacts were outwith the area and notified to the

respective clinics ; 340 were local contacts. A further 74 notifications of female contacts were received from elsewhere ; of a total of 414 contacts 388 were located by the Health Visitors, 363 (93.6 per cent.) of whom were persuaded to attend. This reflects the exceptional efficiency and ability of the contact tracers to persuade women to attend once they are given adequate information to act upon. The outcome of contact tracing efforts is set out in Table VII, and a note of the promiscuity of female contacts found to be suffering from gonorrhoea in Table VIII. Of the 340 females with sexually acquired infectious diseases 248 attended as contacts notified from the local male clinics or elsewhere, but we are aware, although they did not admit it, that a large proportion of the other 92 attended as a result of our interrogation of their male consorts. The diagnosis of the contacts attending the Glasgow clinics during 1966 is set out in Table IX. A number of those diagnosed as suffering from non-venereal conditions defaulted before a diagnosis could be made.

CASE HOLDING.

During 1966 a large number of promiscuous women attended clinics as a result of contact tracing efforts with the result that case holding was more difficult than in the previous year. The average number of attendances for gonorrhoea by females was 5.9 (6.5 in 1965), but there was an improvement in attendances of males, 4.7 compared with (4.3 in 1965).

The efforts to get defaulters to attend in 1966 are set out in Table X. There were fewer male default episodes among those with gonorrhoea than in 1965, 544 compared with 602, despite a greater number of patients at risk, 1,335 compared with 1,284, but only 33 per cent returned in 1966 compared with (39 per cent in 1965). The response by patients suffering from syphilis was quite satisfactory and a slight improvement on previous years. There was very little change in the response of female patients to default efforts as compared with the previous year. Once more 53 per cent. of females with gonorrhoea who had defaulted returned to the clinic, and the over-all return rate of 55 per cent. of all female defaults is very satisfactory indeed. There has been a change in the incidence of false names and addresses ; in 1966 a greater proportion of females gave false addresses 152 (22.75 per cent.) compared with males 118 (20.2 per cent.) this again being explained by the number of promiscuous women attending who tend to move from one address to another within a space of weeks or even days.

TABLE I.

ADMISSION AND DISPOSAL OF PATIENTS, 1961-1966.

			1961	1962	1963	1964	1965	1966
On register at 1st January	...	...	1,117	1,101	1,079	1,047	933	1,545
New patients	...	...	4,734	4,609	4,721	4,846	5,089	5,492
Other cases admitted	...	...	271	211	183	244	147	102
Total	...	...	6,122	5,921	5,983	6,137	6,169	7,139
Discharged	...	...	3,370	3,166	3,358	2,829	2,325	2,727
Defaulted	...	...	1,160	1,238	1,131	1,690	1,737	2,256
Transferred	...	...	491	438	447	685	562	456
On register at 31st December	...	...	1,101	1,079	1,047	933	1,545	1,700

TABLE II.

NEW PATIENTS BY DIAGNOSIS, 1961-1966.

Sex	Year	Syphilis	Gonorrhoea	Non Specific Urethritis	Trichomonas Infection	Other Venereal Infections	Non Venereal Conditions	Total
Male	1961	54	1,209	599	1	359	1,596	3,818
	1962	42	1,199	598	0	367	1,499	3,705
	1963	42	1,211	635	0	354	1,508	3,750
	1964	49	1,200	640	1	351	1,534	3,775
	1965	50	1,045	751	29	706	1,215	3,796
	1966	49	1,062	807	23	926	1,163	4,030
Female	1961	27	200	—	70	80	536	916
	1962	18	215	—	119	72	480	904
	1963	16	213	—	165	60	517	971
	1964	26	269	—	184	65	527	1,071
	1965	32	282	—	341	66	572	1,293
	1966	25	336	—	410	121	570	1,462

TABLE III.

TYPES OF SYPHILIS IN NEW PATIENTS, 1961-1966.

Year	Contagious				Late acquired				Congenital			
	M	F	M	F	Under 1 yr.	1-4 yrs.	5-14 yrs.	15 yrs. & over				
1961	16	2	36	18	—	1	—	8				
1962	22	4	19	5	—	—	—	10				
1963	19	4	22	9	—	—	1	3				
1964	25	10	24	11	—	—	1	5				
1965	6	5	39	15	—	1	—	11				
1966	15	10	32	7	—	—	—	10				

TABLE IV.

SEXUALLY ACQUIRED GONORRHOEA BY AGE GROUPS, 1961-1966

Sex	Year	Under 15	15-19	20-24	25-34	35-44	45 & over	Total
Male	1961	—	65	322	498	228	96	1,209
	1962	—	68	290	530	208	103	1,199
	1963	—	72	315	486	217	121	1,211
	1964	—	69	280	538	213	100	1,200
	1965	—	59	258	455	168	102	1,042
	1966	—	73	286	457	160	78	1,054
Female	1961	—	32	73	67	19	7	198
	1962	—	28	72	73	30	10	213
	1963	—	46	69	69	21	5	210
	1964	2	49	95	92	24	5	267
	1965	1	61	100	69	38	7	276
	1966	3	74	99	121	22	11	330

TABLE V.

QUARTERLY IN VITRO RESISTANCE OF GONOCOCCI TO ANTIBIOTICS.

Antibiotic	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Streptomycin	49	22.7	66	24.6	73	23.1	72	21.4	260	23.1
Sulphonamides	2	0.9	7	2.6	11	3.5	6	1.7	26	2.3
Kanamycin*	—	—	—	—	24	7.6	13	3.9	37	5.7
Tetracycline	1	0.5	—	—	—	—	1	0.3	2	0.2
No. of Strains examined	211	100.0	268	100.0	316	100.0	332	100.0	1,127	100.0
No. of Strains sensitive to all antibiotics ...	160	75.8	196	73.1	226	71.5	252	75.9	834	74.2

* Sensitivity tests to Kanamycin only carried out from July.

TABLE VI.

THE INCIDENCE OF CONTAGIOUS SYPHILIS AND GONORRHOEA IN SEAMEN COMPARED WITH TOTAL MALES OVER THE PAST SIX YEARS.

Year	Contagious Syphilis			Gonorrhoea		
	Total	Seamen	%	Total	Seamen	%
1961	16	4	25	1,209	107	8.8
1962	22	9	41	1,199	117	9.8
1963	19	7	37	1,211	99	8.2
1964	25	7	28	1,200	97	8.1
1965	6	1	17	1,042	96	9.2
1966	15	7	47	1,054	83	7.7

TABLE VII.

THE OUTCOME OF EFFORTS TO TRACE FEMALE CONTACTS.

Notification	Status	Total	Not Traced	Notified Elsewhere	Located	Refused	Diagnosis	
							Confirmed	Not Confirmed
From Local Clinics	Marital	147	15	4	128	4	104	20
	Other	920	695	13	212	21	157	34
From Elsewhere	Marital	3	—	—	3	—	3	—
	Other	71	26	—	45	—	33	12
Total		1,141	736	17	388	25	297	66

TABLE VIII.

THE PROMISCUITY OF FEMALE CONTACTS ATTENDING WITH GONORRHOEA.

Named by 1 man	...	186
Named by 2 men	...	25
Named by 3 men	...	10
Named by 4 men	...	3
Named by 8 men	...	1
		225

TABLE IX.

THE DIAGNOSIS OF CONTACTS ATTENDING THE CLINICS.

Sex		Syphilis	Gonorrhoea	Other Venereal	Non Venereal	Total
				Infections	Conditions	
Male	...	3	11	9	—	23
Female	...	4	225	50	29	308
Total	...	7	236	59	29	331

TABLE X.

ATTEMPTS TO GET DEFAULTERS TO RE-ATTEND IN 1966.

Sex	Diagnosis	Nos. at Risk	Default Episodes	Re-attending No.	%	Efforts Needed Visits	Letters
Male	Gonorrhoea	1,335	544	180	33	—	573
	Contagious Syphilis	46	12	10	83	—	16
	Late Syphilis	142	27	20	74	—	35
	Congenital Syphilis	16	—	—	—	—	—
	Totals	1,539	583	210	36	—	624
Female	Gonorrhoea	460	612	322	53	855	210
	Contagious Syphilis	30	13	11	85	20	7
	Late Syphilis	97	23	17	74	29	3
	Congenital Syphilis	54	20	18	90	25	6
	Totals	641	668	368	55	929	226

SECTION IX

MENTAL SERVICES.

The care of the mentally disordered in the community evolved slowly in the pattern of the last few years. The two assessment centres, the nursery at Balvicar Street and the combined nursery and junior centre at Broomhill, expanded their work. Plans were made for establishing two further centres similar to Broomhill, and when these come into operation the needs of the younger mental defectives should be more reasonably met.

A new senior occupation centre for females was opened in attractive premises, formerly the Pollokshields Burgh Hall. The Scottish Society for Mentally Handicapped Children also added to their facilities for the older group by opening a short-stay home at Alyth for males over 13 years.

The meetings between the hospital staffs and the public health staff continued to be held and various important subjects such as psycho-geriatric care, industrial therapy and alcoholism were thoroughly discussed. These meetings were very interesting although it must be admitted that the discussions were often inconclusive. No immediate action has been taken but it may be that future action will have its origin in the ideas put forward.

Training of Staff.—The series of courses to train Health Visitors for after-care work was discontinued in 1965 and no training took place in 1966. Arrangements were made, however, for a similar course to be started under the auspices of Strathclyde University.

The well established Glasgow courses for Medical Officers in Mental Deficiency and Psychiatry were again held. Six of the Department's medical staff attended the former and eight the latter. Courses in London in Prevention of Mental Ill-Health, conducted by Professor Caplan of Harvard University, were attended by three Medical Officers and one Health Visitor. The Health Department in Edinburgh organised a three weeks' course for Mental Health Officers and three of our Welfare Officers received instruction.

In 1964 Jordanhill College had organised a course for the staff dealing with mentally defective children. Fifteen of our nursery nurses attended at that time. A second course proposed for 1965 did not take place but was carried through in 1966 and a further seven of

the Department's staff received this important training. With the additional knowledge of the educational aspects the care of the children is more effective. Some indication of the good results achieved is included in the statistical account given below.

CARE OF MENTAL DEFECTIVES.

Child Development Clinics.—The two Medical Officers from the Department in charge of the clinics at Glenfarg Street and Balvicar Street continued their work of assessment and advice supported by visiting consultants when required. Combined figures for the two clinics follow :—

			1966	1965
	Male	Female	Both Sexes	Both Sexes
New Patients Attending ...	95	70	165	143
Total Patients Attending ...	197	164	361	240
Total Attendances ...	482	305	787	569

1965 was the first full year's work at these clinics and the considerable increase in the work done in 1966 is seen from the figures. Especially interesting is the increased demand for this service as illustrated by the rise in the number of new patients. The service has a special importance as the first contact of the handicapped child and his parents with the local authority. Seven hundred and eighteen visits were made by the two Health Visitors who attend at the two clinics and extend the work into the patient's homes.

Balvicar Nursery Centre.—The 25 places at this centre remained fully occupied. There were 19 boys and 6 girls on the register at the end of the year, the same numbers as at the end of 1965. The nursery works on a system of two overlapping shifts. The first batch of children arrive at 9.30 a.m. and leave at 2.30 p.m.; the second arrives at 11.30 a.m. and leaves at 4 p.m. This arrangement was largely dictated by lack of floor space. It has the advantage that one vehicle is able to cope with all the children coming from widely scattered homes to the south of the river. Also each half of the children in turn get a spell of individual attention from the staff.

Of the children who left the nursery during the year, four went to Occupation Centres, one to a Special School, one to a class for aphasic children and one to an ordinary nursery. Two children were not mentally defective; one, having dystrophy, went to a residential school, and the other, originally classified as a problem child, was taken into an ordinary school.

Broomhill Nursery and Junior Centre.—Miss Potts, who was the first matron of the centre which started at Moffat Street and later moved to Broomhill, left the service during the year. Her pioneering work was much appreciated. She was succeeded by Mrs. Reid who had been on the staff at Broomhill for some time.

On paper the Broomhill Centre has 42 places but the premises were reasonably full with the 37 children on the roll at the end of 1966. These comprised 20 children under five years of age (13 boys and 7 girls) and 17 over fives (9 boys and 8 girls). The nursery centre is on the ground floor and the junior centre on the first floor, but promotion is not strictly on the basis of age but rather on ability to take part in the activities. One of the advantages of Broomhill is good outdoor play space.

Three of the children who left during the year were taken into permanent hospital care. The other eleven were transferred to the education services, four to occupation centres, three to physically handicapped school, two to ordinary school and one each to schools for the deaf and partially sighted. There is no doubt that the centre has had excellent results in improving the prospects of their charges. This is one of the advantages in starting with the youngest defective children, which has been the Department's policy. The reverse side of the coin is seen with a minority of children who are admitted at a later age. It proves very difficult to get these children to mix with the group. Additional junior centres are urgently needed.

Laurieston House Centre.—The combined Nursery and Junior Centre run by the voluntary workers of the Scottish Society for Mentally Handicapped Children continued its good work. In spite of some expansion in the Corporation services the number who attended in 1966 was greater than in 1965.

		Male	Female	Both Sexes
Under 5 years	...	22	10	32
Over 5 years	... ..	34	31	65
		—	—	—
Total	...	56	41	97
		—	—	—

Most of these children attend on one day per week but it was found possible to take 12 of them on a second day and of these there were four attending for a third day.

The Centre takes many of the most severely defective children but yet manages to achieve a turnover of patients, including a fair

proportion of "promotions". The following is an analysis of the children who left Laurieston House :—

Permanent Care ...	...	13
Occupation Centres ...	...	11
Broomhill Centre ...	...	5
Balvicar Nursery ...	...	2
Private Nursery ...	...	1
		32

Short-Stay Homes.—Viewpark, Alyth, a new short-stay home for males over 13 years of age, was opened in April, 1966, by the Scottish Society for Mentally Handicapped Children. Twenty-one Glasgow patients were admitted here during the year. At Stewart Home, Cove, which is for the females and children, there were 130 Glasgow patients given a short holiday.

DEFECTIVES UNDER GUARDIANSHIP AND INFORMAL CARE.

The number of mentally disordered detained under guardianship changed very little during the year. Only one male patient was received into guardianship during 1966.

The numbers under guardianship at the end of 1966 are compared with similar figures for 1965 :—

			Mental Defectives		Mentally Ill	
			1966	1965	1966	1965
Guardianship	Male	...	141	132	2	9
in Glasgow :	Female		116	112	3	7
Guardianship	Male	...	90	101	7	4
out of Glasgow :	Female	...	63	68	4	4
Total on Roll :	Male	...	231	233	9	13
	Female	...	179	180	7	11
	Both Sexes		410	413	16	24

The total number of mental defectives in the informal category remained very similar to 1965 but there is considerable change here, new patients being taken on and others removed from care.

			1966	1965
Male ...	...		343	330
Female	...		349	365
Both Sexes	...		692	695

Visits paid during the year by the Medical Officers and Mental Welfare Officers were as follows :—

	Medical Officers	Mental Welfare Officers	Total
Patients under Guardianship ...	1,414	872	2,286
Patients under Informal Care ...	1,494	804	2,298
	<u>2,908</u>	<u>1,676</u>	<u>4,584</u>

CARE OF THE MENTALLY ILL.

The Department's Medical Officers were called on to certify 19 mental patients during the year, two of these being dealt with under Section 103 of the Mental Health (Scotland) Act, 1960. This compares with 22 patients certified in 1965. Most of these certificates are called for by the mental hospitals in cases where a general practitioner is not available.

AFTER-CARE BY HEALTH VISITORS.

Throughout the year there were 19 Health Visitors working in this service. Their numbers had been increased from 17 to 19 in December, 1965. As in previous years they devoted half of their working week to this mental health duty.

There were 440 patients receiving visits at the close of 1966 compared with 413 in 1965 :—

	Male	Female	Both Sexes
Discharged from Hospital ...	77	281	358
Referred from Out-Patient Clinics	12	70	82
	<u>89</u>	<u>351</u>	<u>440</u>

Compared with 1965 there were 17 more men on the visiting lists and only 10 more women. The ratio of females to males has steadily increased from the start of the service until 1965. This year it is just under four women to one man, which is a step in the right direction, but there still would appear to be a deficiency in the number of men receiving care. Referral rate, which is probably the more appropriate measure, makes this deficiency less obvious.

The average case load per Health Visitor is 23 cases; one case per visitor fewer than a year ago.

There were 539 new referrals (144 men and 395 women). This works out at just over 28 new referrals per Health Visitor for the year compared with an average of 26 for the previous year. This suggests

a fractionally quicker turnover. It is also obvious that the men are taken into care and dismissed from care more rapidly than the women.

The following table classifies the patients in care at the end of the year by probable diagnosis :—

	Male	Female	Both Sexes
Schizophrenia ...	32	79	111
Affective Psychosis ...	14	81	95
Psychoneurosis ...	21	128	149
Organic States ...	6	19	25
Geriatric ...	—	19	19
Addiction ...	9	9	18
Others ...	7	16	23
	<u>89</u>	<u>351</u>	<u>440</u>

There has been an increase in female neurotics under care and also of male schizophrenics but there are fewer females with affective psychosis.

After-care visits in 1966 totalled 6,467, which is a small decrease on the 1965 total of 6,738.

Social Clubs.—The two social clubs which meet on one evening per week at Fernbank Street and Orr Street Clinics continued with their activities. The after-care Health Visitors at Woodilee and the Eastern District Hospital have been largely responsible for this work. In 1966 at Orr Street the help of Mr. Ritchie, who has experience in Youth Club work, was enlisted and his knowledge has been of considerable benefit.

TABLE II.

*Re-Examinations, 1966.**Age and Sex Distribution.*

Age in Years	Certified Blind			Certified Partially-Sighted			Certified as neither Blind nor Partially-Sighted		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
—1	—	—	—	—	—	—	—	—	—
1-4	1	3	4	—	—	—	—	—	—
5-15	3	4	7	3	1	4	1	—	1
16-29	5	4	9	5	5	10	—	1	1
30-39	7	1	8	2	3	5	1	1	2
40-49	1	3	4	5	9	14	1	1	2
50-59	9	17	26	10	12	22	5	1	6
60-69	15	22	37	15	32	47	6	13	19
70+	34	64	98	38	70	108	5	25	30
Total	75	118	193	78	132	210	19	42	61

Of the 1,351 persons examined in 1966, 41·2 per cent. resided in Glasgow and 21·9 per cent. in Lanarkshire.

Of persons having a first examination 38·0 per cent. resided in Glasgow and 20·2 per cent. in Lanarkshire, while of persons being re-examined 47·4 per cent. resided in Glasgow and 22·3 per cent. in Lanarkshire.

The local authority area distribution of the persons examined is given in Table III (first examinations) and Table IV (re-examinations).

TABLE III.

*Initial Examinations, 1966.**Local Authority Distribution.*

Local Authority	Certified Blind			Certified Partially Sighted			Not Certified		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
Glasgow	76	118	194	29	73	102	13	28	41
Airdrie	4	5	9	1	2	3	2	2	4
Coatbridge	2	5	7	—	7	7	4	4	8
Hamilton	3	2	5	2	—	2	—	2	2
Motherwell	9	9	18	2	2	4	—	1	1
Rutherglen	2	2	4	2	1	3	—	—	—
Other Lanarkshire	17	32	49	9	31	40	5	8	13
Greenock	8	24	32	4	5	9	2	4	6
Paisley	8	12	20	3	7	10	3	3	6
Port Glasgow	3	6	9	1	—	1	1	—	1
Other Renfrewshire	13	20	33	1	7	8	—	5	5
Dumbarton	4	3	7	1	1	2	—	—	—
Clydebank	—	3	3	2	2	4	—	—	—
Other Dunbartonshire	6	9	15	5	6	11	1	2	3
Falkirk	1	—	1	2	1	3	—	—	—
Stirling	4	4	8	2	1	3	1	5	6
Other Stirlingshire	2	18	20	2	13	15	1	6	7
Ayr	3	3	6	3	1	4	—	1	1
Kilnarnock	2	1	3	2	2	4	—	—	—
Other Ayrshire	14	26	40	6	13	19	5	5	10
Argyll County	5	8	13	—	—	—	2	2	4
Bute County	3	6	9	—	4	4	—	—	—
Dumfries Burgh	1	1	2	—	4	4	—	—	—
Total	190	317	507	79	183	262	40	78	118

TABLE IV.

*Re-Examinations, 1966.**Local Authority Distribution.*

Local Authority	Certified Blind			Certified Partially Sighted			Not Certified		
	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes
Glasgow	38	52	90	41	63	104	7	19	26
Airdrie	1	3	4	2	2	4	—	—	—
Coatbridge	1	4	5	5	7	12	1	—	1
Hamilton	1	2	3	1	2	3	—	1	1
Motherwell	3	3	6	3	4	7	—	—	—
Rutherglen	—	—	—	2	—	2	1	—	1
Other Lanarkshire	7	13	20	7	14	21	3	10	13
Greenock	5	4	9	3	7	10	—	—	—
Paisley	1	3	4	—	3	3	—	2	2
Port Glasgow	—	1	1	—	—	—	—	—	—
Other Renfrewshire	3	2	5	1	4	5	1	1	2
Dumbarton	—	1	1	—	1	1	2	1	3
Clydebank	—	3	3	—	1	1	1	—	1
Other Dunbartonshire	2	2	4	—	1	1	—	1	1
Falkirk	—	2	2	1	4	5	—	1	1
Stirling	1	4	5	3	4	7	—	3	3
Other Stirlingshire	3	4	7	3	5	8	—	1	1
Ayr	1	2	3	—	1	1	—	—	—
Kilmarnock	—	2	2	1	—	1	1	—	1
Other Ayrshire	6	6	12	3	6	9	2	1	3
Argyll County	—	4	4	1	2	3	—	—	—
Bute County	1	1	2	1	1	2	—	1	1
Dumfries Burgh	1	—	1	—	—	—	—	—	—
Total	75	118	193	78	132	210	19	42	61

In 1966 48·9 per cent. of persons were examined at home compared with 43·4 per cent. in 1965.

Of the 464 persons re-examined during the year at the request of the examining surgeon or at their own request or following altered circumstances there was no change in the classification in 317 persons (68·3 per cent.) of whom 57 were blind. Of the remainder 15 were found to be no longer blind and 132 previously not blind were now found to be blind.

Comparing the number certified blind in 1966, 639, comprising 507 persons blind on first examination together with the 132 persons certified blind on re-examination and previously not blind with the 628 certified blind in 1965, 497 on first examination and 131 on re-examination, the difference is less than 2 per cent.

TABLE V.

Initial Examinations, 1966.

	At Clinic	At Home	All Cases	Per Cent. at Home
Certified Blind	239	268	507	52.9
Certified Partially Sighted	139	123	262	46.9
Not Certified	75	43	118	36.4
	<u>453</u>	<u>434</u>	<u>887</u>	<u>48.9</u>

TABLE VI.

Re-Examinations, 1966.

	At Clinic	At Home	All Cases	Per Cent. at Home
1. Blind persons previously certified as blind	43	14	57	24.6
2. Persons previously certified as blind but not now blind	8	7	15	46.7
3. Persons found not blind at present examination and at previous examination	177	83	260	31.9
4. Persons now certified as blind who were not blind at the previous examination	71	61	132	46.2
	<u>299</u>	<u>165</u>	<u>464</u>	<u>35.6</u>

The causes of blindness in persons examined for the first time and in persons re-examined are given in Table VII. Cataract (27.6 per cent.), arteriosclerosis (21.3 per cent.), glaucoma (13.8 per cent.), myopia (10.3 per cent.), diabetes (7.9 per cent.) and congenital abnormalities (6.3 per cent.) were together responsible for 87.2 per cent. of all causes of blindness in persons examined for the first time. The corresponding percentages for re-examinations were cataract (27.0), arteriosclerosis (9.0), glaucoma (6.9), myopia (18.5), diabetes (8.5), congenital abnormalities (10.1), these conditions being responsible for 80.0 per cent. of all causes of blindness in the persons re-examined.

TABLE VII.

*Initial and Re-Examinations, 1966.**Causes of Blindness.*

	Initial Examina- tions.	Re- Examina- tions.
<i>Congenital and Undetermined—</i>		
Congenital Anomalies	20	17
Abiotrophies, etc.	12	2
Tumour of Globe or Orbit	1	—
Myopia	52	35
Glaucoma—Primary	70	13
Cataract—Primary	140	51
Transmitted Maternal Infection	—	3
<i>Infectious and Toxic—</i>		
Exogenous—Ophthalmia Neonatorum ...	2	1
Trichiasis	1	—
Trachoma	1	—
Ulcerative Keratitis	4	2
Endogenous—Syphilis Congenital ...	3	4
Virus Infections—Measles ...	2	1
Bacterial Infections	1	1
Phlyctenular, Strumous, etc. ...	3	3
Chronic Septicaemia, etc. ...	6	4
Others	4	2
<i>Traumatic and Chemical—</i>		
Birth Injury	—	2
Household Accident	1	—
Industrial Trauma—Mining	—	1
Agriculture	—	1
Others	1	—
War Injury	—	1
Chemico-toxic	—	2
<i>Systemic Disease—</i>		
Anaemia and Blood Disease	1	—
Diabetes	40	16
Vascular Disease (Eale's Disease) ...	—	1
Essential Hypertension	11	4
Arteriosclerosis	108	17
Cerebral Arteriosclerosis	7	—
Cerebral Thrombosis	1	—
Arteritis	1	—
Intracranial Neoplasm	3	—
Disseminated Sclerosis	3	—
Tabes	1	—
Brain Abscess	—	1
Other Disease of Central Nervous System	3	1
Functional Disease (Psychoneurosis) ...	—	1
Acne Rosacea	1	—
Detachment of Retina	—	1
Retinitis Pigmentosa	1	—
Not classified owing to lack of data ...	2	1
Total	507	189

FOLLOW-UP SCHEME.

This scheme deals with those patients examined at the Regional Clinic and considered by the examining surgeons as likely to benefit from further treatment. With the co-operation of the Society for the Blind, home teachers enquire and report as to the treatment and progress of these patients. When operative or other treatment has been completed, the patient is re-examined and any improvement noted, except for those few cases where treatment was recommended for systemic disease and where the eye condition was irremediable and not amenable to treatment.

TABLE VIII.

Follow-Up Scheme of Persons considered likely to benefit from Medical or Surgical Treatment or from the Continuation of such Treatment.

(i) Blind.

	Treatment Carried Out				Treatment not Carried Out				Follow-up not yet Complete	Total
	Still Blind	Now Partially Sighted	Now Sighted	Not Yet Re-exam.	Dead	Unfit	Unwilling	Others		
Surgical	6	5	4	7	7	30	18	2	28	107
Medical	1	—	—	1	—	3	1	—	—	6
Total	<u>7</u>	<u>5</u>	<u>4</u>	<u>8</u>	<u>7</u>	<u>33</u>	<u>19</u>	<u>2</u>	<u>28</u>	<u>113</u>

(ii) Partially Sighted.

	Treatment Carried Out				Treatment Not Carried Out				Follow-up not yet Complete	Total
	Still P.S.	Now Blind	Now Sighted	Not Yet Re-exam.	Dead	Unfit	Un- willing	Others		
Surgical	5	2	1	6	1	4	1	—	5	25
Medical	—	—	—	2	—	—	—	—	—	2
Total	<u>5</u>	<u>2</u>	<u>1</u>	<u>8</u>	<u>1</u>	<u>4</u>	<u>1</u>	<u>—</u>	<u>5</u>	<u>27</u>

(iii) Not Blind.

	Treatment Carried Out				Treatment Not Carried Out				Follow-up not yet Complete	Total
	Still Not Blind	Now P.S.	Now Blind	Not Yet Re-exam.	Dead	Unfit	Un- willing	Others		
Surgical	1	2	—	2	—	—	—	2	—	7
Medical	—	—	—	—	—	—	—	—	—	—
Total	<u>1</u>	<u>2</u>	<u>—</u>	<u>2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>2</u>	<u>—</u>	<u>7</u>

The group "Unwilling" is comprised mainly of elderly persons who, owing to their advanced age, do not feel inclined to undergo an operation.

In the group "Other" are included patients who for medical reasons are not yet ready for operative procedures.

*Age at Certification of Blindness—Pre-War and at present
Comparison of the Five Years 1934-1938 and 1962-1966.*

Comparing the five-year period ending with 1966 with the pre-war five-year period ending in 1938, there has been a slight fall of 7.4 per cent. in the number of persons certified blind. This fall has been associated with a fall of 29.4 per cent. in male certifications offset to a large extent by an increase of 15.3 per cent. in female certifications. The rise in the female certifications is entirely accounted for by a rise of 136.0 per cent. in the age-group 70 years and over, there being a fall in other age-groups. While the total number of certifications of males had fallen by 29.4 per cent., there had here also been a rise in certifications in the age-group 70 years and over but to a lesser extent.

The age and sex incidence at certification and the percentage changes in the various groups for the two five-year periods are given in Table IX.

TABLE IX.

*Age and Sex Distribution of Persons Certified Blind at the
Regional Blind Clinic during the Periods 1934-1938 and 1962-1966 with
the Percentage Change.*

Age in Years	1934-1938			1962-1966			Percentage Changes		
	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes
0-15 ...	27	33	60	41	21	62	-59.1	-36.4	-3.3
16-29 ...	83	70	153	29	17	46	-65.1	-75.7	-69.9
30-39 ...	99	84	183	28	12	40	-71.7	-85.7	-78.1
40-49 ...	163	125	288	62	18	80	-62.0	-85.6	-72.2
50-59 ...	241	213	454	88	111	199	-63.4	-47.9	-56.2
60-69 ...	338	336	674	191	321	512	-43.5	-4.5	-24.0
70 and over	361	408	769	487	963	1,450	+34.9	+136.0	+88.6
Total ...	1,312	1,269	2,581	926	1,463	2,389	-29.4	+15.3	-7.4

The broad classification of causes of blindness for the periods 1934-1938 and 1962-1966 with the percentage change is given in Table X. Infectious, toxic, traumatic and chemical causes have dramatically fallen, while the systemic diseases which include diabetes and diseases of the vascular system as a cause have risen.

TABLE X.

*Causes of Blindness for the Periods
1934-1938 and 1962-1966 with Percentage Changes.*

	Period 1934-1938	Period 1962-1966	Percentage Change
Congenital and Undetermined Causes	1,394	1,426	+2.3
Infectious and Toxic Causes ...	782	123	-84.3
Traumatic and Chemical Causes ...	142	31	-78.2
Systemic Diseases ...	246	797	+224.0
Not otherwise classified ...	17	12	—
Total ...	2,581	2,389	-7.4

REGIONAL BLIND ROLL (AREA OF JOINT COMMITTEE FOR THE BLIND,
GLASGOW AND SOUTH-WEST SCOTLAND).

Persons on the Regional Blind Roll at 31st December, 1966, numbered 5,729 (2,353 males and 3,376 females). Glasgow cases numbered 2,295 (40·1 per cent.), 959 males and 1,336 females.

TABLE XI.

*Age and Sex Distribution of Persons on the
Regional Blind Roll at 31.12.66.*

Age in Years	Males		Females		Both Sexes	
	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.
0-4	6	0·3	6	0·2	12	0·2
5-14	64	2·7	48	1·4	112	2·0
15-19	38	1·6	25	0·7	63	1·1
20-24	36	1·5	21	0·6	57	1·0
25-34	85	3·6	58	1·7	143	2·5
35-44	131	5·6	94	2·8	225	3·9
45-54	238	10·1	195	5·8	433	7·6
55-64	417	17·7	476	14·1	893	15·6
65-74	538	22·9	857	25·4	1,395	24·3
75 and over ...	800	34·0	1,594	47·2	2,394	41·8
Not stated ...	—	—	2	0·1	2	0·0
Total	<u>2,353</u>	<u>100·0</u>	<u>3,376</u>	<u>100·0</u>	<u>5,729</u>	<u>100·0</u>

The percentage aged 65 years and over of males on the blind register at 31.12.66 was 56·9 per cent. and of females 72·6 per cent. The percentage of all males certified within a period of five years was 39·7 per cent. and of females 45·5 per cent., while the percentage of males certified for over 25 years was 15·6 per cent. and of females 10·2 per cent. Table XII gives the duration of certification of persons aged 65 years and over.

TABLE XII.

*Duration of Certification of Persons
aged 65 years and over on Blind Roll at 31.12.66.*

Duration of Certification			Males	Females	Both Sexes	Per Cent.
Within 5 years	...	...	606	1,215	1,821	48·1
5-9 years	...	...	269	533	802	21·2
10-14 years	...	...	162	332	494	13·0
15-19 years	...	...	100	132	232	6·1
20-24 years	...	...	30	61	91	2·4
25 years and over ...	...	...	171	178	349	9·2
Total	...	...	<u>1,338</u>	<u>2,451</u>	<u>3,789</u>	<u>100·0</u>

On the Blind Roll at 31.12.66 there were 781 persons with cataract of both eyes (congenital in 139 cases), and 173 persons with cataract of one eye and surgical aphakia of the other, and 78 persons with surgical aphakia of both eyes, a total of 1,032 persons, 19.7 per cent. of all persons on the Blind Roll.

Table XIII gives the number of persons on the Roll, where there are more than 100 in the category with similar defects of both eyes.

TABLE XIII.

*Causes of Blindness of Persons on the Blind Roll at 31.12.66
where the Cause of Blindness was the same for both Eyes
and there were more than 100 cases in the Group.*

	Males	Females	Both Sexes
Cataract (Congenital)	72	67	139
Ulcerative Keratitis	97	150	247
Interstitial Keratitis	50	95	145
Iridocyclitis	66	140	206
Retinopathy, Exudative, Neuro-retinopathy	73	190	263
Degenerative Retinopathy, Retinitis Pigmentosa, etc.	135	126	261
Senile Macular Degeneration	130	262	392
Optic Nerve Atrophy and Neuritis	161	114	275
Cataract—Not Congenital	193	449	642
Myopia	270	602	872
Glaucoma, Primary	266	332	598
Cortical and Tract Lesions	72	60	132
Total ...	1,585	2,587	4,172
Total Cases with same diagnosis in both eyes	1,976	2,969	4,945
Total Cases on Blind Roll	2,353	3,376	5,729
Percentage with same diagnosis in both eyes	84.0	87.9	86.3

SECTION XI

PORT HEALTH AUTHORITY.

The formation of the new Clyde Port Authority establishes the River Clyde as Scotland's major port.

The modernisation of the dock areas, which must inevitably follow, will provide better service to shipowners and shippers in the form of more up-to-date facilities and equipment.

The advent of container traffic (a new form of door-to-door delivery) is already having effect throughout the industry from shipbuilding and transportation to the humblest of importers. There are many problems to be solved, one of which is of considerable interest to this Department—the examination of imported foodstuffs. This procedure may have to be carried out in some central checkpoint under customs control.

The new Public Health (Ships) (Scotland) Regulations, 1966, which came into operation on the 22nd December, 1966, consolidate the 1952-63 Regulations and make minor adjustments to conform with the current International Sanitary Regulations of the World Health Organisation. They also introduce the new form of International Vaccination Certificate.

During 1966 a total of 5,295 ships with an aggregate tonnage of 7,527,537 entered the Port compared with 4,623 ships with a tonnage of 6,986,354 for the previous year.

This total includes 1,355 ships (tonnage 4,248,341) from foreign ports, 544 of them from infected ports; 120 of these arrived direct from foreign and the other 424 via home ports. The remaining 811 ships from foreign ports came from non-infected areas.

TONNAGE OF VESSELS ARRIVING FROM OVERSEAS.

	No. of Ships	Crews	Nett Reg. Tonnage
January ...	101	4,092	340,595
February ...	84	3,404	296,898
March ...	123	4,850	371,502
April ...	118	4,273	370,014
May ...	121	4,324	350,169
June ...	105	3,560	311,807
July ...	117	4,440	357,965
August ...	130	4,799	384,422
September ...	115	4,463	398,872
October ...	107	4,130	357,940
November ...	121	4,581	401,372
December ...	113	3,719	306,785
	<u>1,355</u>	<u>50,635</u>	<u>4,248,341</u>

Particulars of arrivals are given in the following table :—

NATIONALITY OF VESSELS ARRIVING DURING 1966.

Nationality				Ships	Crews	Passenger
American	...	...	...	33	1,476	41
Belgian	...	...	...	7	193	6
British	...	...	...	710	33,573	422
Burmese	...	...	...	1	64	—
Czechoslovakian	...	...	...	1	46	—
Danish	...	...	...	30	549	9
Dutch	...	...	...	130	1,597	16
Eire	...	...	...	6	221	—
Ethiopian	...	...	...	1	26	—
Finnish	...	...	...	4	112	—
French	...	...	...	2	47	2
German	...	...	...	77	1,281	24
Greek	...	...	...	28	686	—
Indian	...	...	...	17	1,071	—
Israeli	...	...	...	8	206	6
Italian	...	...	...	7	237	—
Lebanese	...	...	...	1	15	—
Liberian	...	...	...	38	1,178	1
Monrovia	...	...	...	3	57	—
Nigerian	...	...	...	3	144	—
Norwegian	...	...	...	128	3,815	22
Pakistanian	...	...	...	7	350	—
Panamanian	...	...	...	13	377	—
Polish	...	...	...	6	94	—
Rumanian	...	...	...	4	132	—
South African	...	...	...	13	721	7
Spanish	...	...	...	17	338	2
Swedish	...	...	...	39	1,261	10
Swiss	...	...	...	2	76	—
United Arab Republic	...	...	...	1	35	—
U.S.S.R.	...	...	...	6	276	—
Yugo-Slav	...	...	...	12	381	—
				<u>1,355</u>	<u>50,635</u>	<u>568</u>

NATIONALITY OF SHIPS' CREWS ARRIVING DURING 1966.

Month	British	Indian	Chinese	Other Nationalities on British Ships	Total Crews on British Ships	Crews on Other Ships	Over-all Total Crews	Passengers on British Ships	Passengers on Other Ships	Total Passengers
January ...	1,992	141	135	651	2,919	1,173	4,092	2	3	5
February ...	1,650	181	110	431	2,372	1,032	3,404	—	—	—
March ...	2,368	366	256	458	3,448	1,402	4,850	—	7	7
April ...	2,022	101	121	656	2,900	1,373	4,273	10	6	16
May ...	1,640	158	161	445	2,404	1,920	4,324	52	13	65
June ...	967	52	119	617	1,755	1,805	3,560	69	26	95
July ...	1,834	48	214	627	2,723	1,717	4,440	78	37	115
August ...	2,431	147	135	796	3,509	1,290	4,799	52	23	75
September ...	2,065	91	392	668	3,216	1,247	4,463	84	8	92
October ...	1,997	24	77	724	2,822	1,308	4,130	66	—	66
November ...	2,154	90	236	671	3,151	1,430	4,581	30	2	32
December ...	1,767	53	182	542	2,544	1,175	3,719	—	—	—
Total ...	22,887	1,452	2,138	7,286	33,763	16,872	50,635	443	125	568

NUMBER OF VESSELS FROM FOREIGN PORTS AND IRISH FREE STATE DURING 1966.

Month.	FROM INFECTED PORTS.						FROM NON-INFECTED PORTS. Direct and Coastwise.			FROM FOREIGN PORTS.			From Irish Free State			
	Class "A"—Direct.			Class "B"—Coastwise.			Total "A" and "B."			TOTAL.						
	Ships	Crews	Pass- engers	Ships	Crews	Pass- engers	Ships	Crews	Pass- engers	Ships	Crews	Pass- engers				
January	12	454	—	34	1,952	2	46	2,406	2	55	1,686	3	101	4,092	5	29
February	3	111	—	33	1,674	—	36	1,785	—	48	1,619	—	84	3,404	—	32
March ...	10	385	—	36	2,133	7	46	2,518	7	77	2,332	—	123	4,850	7	20
April ...	13	518	12	41	2,073	—	54	2,591	12	64	1,682	4	118	4,273	16	26
May ...	14	551	4	35	1,836	2	49	2,387	6	72	1,937	59	121	4,324	65	24
June ...	15	648	5	27	1,363	24	42	2,011	29	63	1,549	66	105	3,560	95	12
July ...	11	450	—	34	1,927	—	45	2,377	—	72	2,063	115	117	4,440	115	24
August	12	479	—	34	1,930	7	46	2,409	7	84	2,390	68	130	4,799	75	28
September	7	287	—	40	2,157	—	47	2,444	—	68	2,019	92	115	4,463	92	28
October	8	324	1	34	1,689	—	42	2,013	1	65	2,117	65	107	4,130	66	22
November	6	250	—	14	2,329	—	50	2,579	—	71	2,002	32	121	4,581	32	31
December	9	332	—	32	1,637	—	11	1,969	—	72	1,750	16	113	3,719	16	17
	120	4,789	22	424	22,700	42	544	27,489	64	811	23,146	520	1,355	50,635	584	293

PUBLIC HEALTH (SHIPS) (SCOTLAND) REGULATIONS, 1966.

There were no cases of quarantinable disease on any vessel entering the River Clyde and only a few minor illnesses reported during the year.

Chickenpox.—The school cruise ship *Dunera* arrived at Glasgow, from lay-up at Falmouth, to undergo overhaul and Board of Trade inspection. Two cases of chickenpox were reported among the skeleton crew, which consisted mainly of Indian seamen. During the next few weeks four more cases of chickenpox were removed to Ruchill Hospital. When the overhaul was completed the ship was due to proceed down-river to Greenock to embark school children for the opening cruise of the season. The Medical Officer of Health for Greenock was informed of the arrival from India of another batch of Indian seamen to make up the crew complement and also advised of all the facts and history of the illnesses to ensure all possible action would be taken to contain this outbreak of chickenpox.

An Indian seaman was transferred from Robroyston Hospital to Ruchill Hospital, diagnosed as a chickenpox case.

Dysentery.—Two separate cases of clinical dysentery were removed to hospital. One of these, an Indian seaman, had recently been transferred from another ship, but on enquiry no history of any further cases on his previous ship was reported.

Enteric Fever.—A naval rating from a H.M. ship anchored in the Gareloch was removed to hospital.

Erysipelas.—A seaman with erysipelas was removed to Belvidere Hospital from a cross-channel steamer in dry dock for annual overhaul.

Food Poisoning.—The *South African Star*, inward bound from Australia via Suez, Dunkirk and London, reported two engineers sick on arrival at Liverpool, both suffering from diarrhoea and vomiting. The patients were removed to hospital, and on the following day four other crew members were also hospitalised. Three more of the crew reported sick with the same complaint, but not of the same severity, and they were kept on board. As the ship was due to sail for Glasgow, all relevant information on the outbreak was forwarded from Liverpool to enable us to continue the investigation. Samples of drinking water, samples of faeces from all catering staff and smear specimens from the butcher and baker shops were submitted for laboratory tests. No further cases of sickness were reported whilst the ship was at Glasgow.

Infective Hepatitis.—A Chinese seaman was admitted to Ruchill Hospital with infective jaundice which was later diagnosed as infective hepatitis.

Malaria.—One suspected malaria patient was admitted to hospital where this diagnosis was confirmed.

Measles.—A baby passenger on a small Dutch ship remained on board with measles.

Pneumonia.—An elderly seaman with pneumonia was removed to hospital.

Tuberculosis.—A seaman from a small coasting vessel was admitted to hospital with tuberculosis. The Medical Officer of Health for the ship's home port in Wales was notified to arrange for X-ray examination of the other crew members.

CASES OF ILLNESS REPORTED ON VESSELS ON ARRIVAL AT GLASGOW.

Disease	Hospital	Home	Clinic	Remained On Board	Died	Total
Chickenpox	7	—	—	1	—	8
Clinical Dysentery ...	2	—	—	—	—	2
Enteric Fever	1	—	—	—	—	1
Erysipelas	1	—	—	—	—	1
Food Poisoning	—	—	—	5	—	5
Infective Hepatitis ...	1	—	—	—	—	1
Malaria	1	—	—	—	—	1
Measles	—	—	—	1	—	1
Pneumonia	1	—	—	—	—	1
Tuberculosis	1	—	—	—	—	1
Others	4	6	—	3	—	13
	<u>19</u>	<u>6</u>	<u>—</u>	<u>10</u>	<u>—</u>	<u>35</u>

CASES OF ILLNESS REPORTED OCCURRING ON VESSELS DURING THE VOYAGE.

Dysentery (2 cases) ...	1 to hospital at Swansea ; 1 remained on board.
Food Poisoning (6 cases) ...	6 to hospital at Liverpool.
Liver Complaint	1 to hospital at Belfast.
Tuberculosis	1 to hospital at Liverpool.
Venereal Disease (5 cases)	1 to hospital at Liverpool ; 4 to clinic.

SAMPLES OF DRINKING WATER.

(a) Chemical :

Sixteen samples from dock hydrants and ships were examined and all were reported suitable for dietetic purposes.

(b) Bacteriological :

Forty-eight samples from ships and dockside water points were examined, and with the exception of samples from two ships, were all reported satisfactory. The masters of these ships were advised to clean and cement wash tanks at the first available opportunity.

Apart from routine water sampling and investigation into possible sources for outbreaks of suspected dysentery and food poisoning, there was only one unusual feature which proved troublesome.

One of the River Clyde passenger steamers was due to take up the seasonal sailings from Bridge Wharf and it was thought advisable to carry out a routine check on the drinking water supply. Samples were drawn from various points on the steamer and submitted to the Analyst and Bacteriologist. The laboratory report indicated *B. coli* and coliforms present in all samples. Further samples were taken from the steamer and water-point at Bridge Wharf. The water-point sample was satisfactory, but the samples from the steamer were still contaminated. Tank cleaning, chlorination and system flushing were carried out and at the first available opportunity fresh samples were tested with no better results.

The marine engineer was consulted as to the various points where "topping-up" of water tanks was carried out during the steamer's daily voyage. The Sanitary Inspector for these areas was contacted and agreed to sample from water-points on the respective piers where the steamer took on fresh water supplies each day. All samples were reported satisfactory except in one instance where the result indicated the possible source of contamination. The water supply in question gravitated from an upland moor catchment area and was neither filtered nor treated in any way. The marine engineer was advised to discontinue taking water supplies from this point. All tanks were again cleansed, chlorinated, flushed through the system, refilled, and the final samples reported as satisfactory.

IMMUNISATION FOR SEAMEN.

The Port Medical Staff provided 111 seamen with immunisation for yellow fever, 51 for cholera and 14 for smallpox.

It should be noted that in recent years there has been a marked improvement in the number of seamen carrying valid inoculation certificates. Any evidence of non-compliance is immediately brought to the attention of shipping companies or agents for action.

DANGEROUS DRUGS ACT.

During the year six certificates were issued under the above Act to masters of foreign-going ships to enable them to complete their medical stores on their ships.

One firm of ship chandlers was severely reprimanded for attempting to obtain a list of drugs on the pretext of renewing a prescription for a seaman with a stomach complaint.

ALIENS ACT, 1953.

There was an increase in the number of vessels carrying alien passengers and an increase in the number of aliens landed at the Port. The comparable figures for the year 1966 were 99 vessels with 280 alien passengers as against 74 vessels with 240 alien passengers during the previous year. There was one rejection on medical grounds. Close co-operation was maintained with H.M. Immigration Officers in the examination of these persons and every assistance was given by the shipping companies in intimating times of arrival and boarding.

The following table shows the number and nationality of aliens arriving at the Port :—

American	...	...	...	...	...	77
Belgian	...	...	...	...	...	4
Danish	...	...	...	...	...	28
Dutch	...	...	...	...	...	43
Filipinos	...	...	...	...	...	8
Finnish	...	...	...	...	...	3
French	...	...	...	...	...	4
German	...	...	...	...	...	31
Greek	...	...	...	...	...	6
Israeli	...	...	...	...	...	5
Italian	...	...	...	...	...	1
Norwegian	...	...	...	...	...	41
Polish	...	...	...	...	...	2
Spanish	...	...	...	...	...	5
Swedish	...	...	...	...	...	20
Turkish	...	...	...	...	...	2

COMMON LODGING HOUSE.

The Queen's Dock Hostel closed down on the 28th May, 1966. The original lodging house, built in 1880, was demolished at the time of the proposed Finnieston Bridge project which did not materialise. The present premises were built in 1928-29 and were reserved for the use of Indian and Pakistani seamen who could be housed there during transit as relief crews for the shipping companies. The property was owned by the Glasgow Sailors' Homes and administered by the Clan Line Steamers, Ltd., and the City Line, Ltd., on behalf of the Indian Shipowners Federation.

The hostel provided accommodation for 97 seamen. A weekly record was received from the Merchant Navy Welfare Board indicating the number of residents using the hostel. A high standard of supervision was maintained by the hostel warden and regular inspection by the Port Health Inspector ensured smooth running of the establishment.

In 1962 the former dock canteen building was annexed and converted to provide increased social activities for those resident in the hostel.

The hostel was finally closed, mainly through lack of support by the shipping companies. It will be sadly missed for it was ideally situated in the midst of dockland, well placed to house seamen flying in from infected areas when daily checks on health were always necessary.

HYGIENE IN CREW'S ACCOMMODATION, ETC.

Routine inspections and re-inspections of all ships arriving within the dock area are carried out by the inspectors and rodent control operators.

For this purpose a total of 2,239 initial and revisits were made by the inspectors during the year.

Under the Public Health (Scotland) Act, 1897, 11 intimations were issued to masters of ships and 198 verbal warnings to ship's officers in respect of minor defaults and nuisances discovered during the inspectors' visits. Thirty-four verbal warnings were also given in regard to fouling of quaysides through improper discharge from ships.

The following tables indicate the type of defect, and the number and nationality of the vessels on which they were located :—

SUMMARY OF STRUCTURAL AND OTHER DEFECTS.

Accumulation of refuse on deck	...	...	28
Accumulation of refuse on floors	...	...	4
Food lockers broken or dirty	...	...	2
Galleys dirty	...	...	11
Heating apparatus defective	...	...	2
Messroom tables—surface broken or dirty	...	...	6
Paintwork dirty, requiring cleansing and repainting	...	...	5
Ports, decklights, etc., defective	...	...	1
Quarters—approach alleyways dirty	...	...	4
Quarters—dirty	...	...	11
Quarters—floors broken	...	...	1
Quarters—verminous	...	...	89
Scuppers choked	...	...	33
Ventilation defective	...	...	5
Wash basins foul	...	...	3
Water-closets—flushing apparatus defective	...	...	5
Water-closets—foul or choked	...	...	23
Water-closets—floors and woodwork dirty	...	...	3

NUMBER AND NATIONALITY OF VESSELS ON WHICH DEFECTS WERE DISCOVERED.

	Defective
Belgian	2
British	129
Danish	2
Dutch	8
German	8
Greek	7
Indian	7
Israeli	1
Italian	2
Liberian	8
Nigerian	2
Norwegian	2
Pakistanian	4
Panamanian	2
South African	6
Spanish	2
Swedish	3
United Arab Republic	1
	196

COASTERS.

British	7
Dutch	2
Eire	4
	13

HYGIENE AND SANITATION IN DOCK AREAS.

The modernisation of toilet facilities in the dock areas progresses slowly. The introduction of washing facilities with hot air driers is a much needed necessity at the docks. It is expected that more improvements will be introduced when the Devlin Report is operative.

The Clyde Port Authority have been considering methods to be adopted to minimise the dust nuisance arising from the discharge of grain cargoes from ships at Meadowside Quay. They have now decided that the only satisfactory method of accomplishing this is to extract the dust at the source, i.e., at the point when the grain is being extracted from the holds of the ship. Final approval to install this machinery will be considered by the Board and it is hoped that this long-standing nuisance will be reduced to a minimum.

FACTORIES ACT, 1961.

The following table shows the number of premises and the number of visits made to factories in the dock areas :—

No. of Premises Registered at 31.12.66			No. of Premises Inspected during Year			No. of Visits		
Non-			Non-			Non-		
Mech.	Mech.	Total	Mech.	Mech.	Total	Mech.	Mech.	Total
20	2	22	22	3	25	60	6	66

THE FOOD HYGIENE (SCOTLAND) REGULATIONS, 1959-61.

There are only four canteens left in the dock areas. Two of these cater for employees of industrial concerns and the other two belong to the National Dock Labour Board.

No. of Premises	No. of Premises Inspected	No. of Visits
4	2	12

RAT DESTRUCTION.

The total number of rats destroyed during the year was 270. Of that total 225 were destroyed on board foreign-going ships—165 as the result of fumigation by H.C.N. gas and 60 by trapping.

The rodent operators made 3,510 visits to ships in the Port and 4,391 visits to premises in the dock areas where evidence was found in 60 instances in sheds, etc. Traps were set and 45 rats were caught.

Thirty-eight specimens of rats, 16 from ships and 22 from shore premises, were submitted to the Bacteriologist for examination for *Pasteurella Pestis*, and negative results were reported on each instance.

Two heavy infestations of rats were discovered, one at Yorkhill Quay and the other at Queen's Dock. The Clyde Port Authority, as owners of the property, were notified and remedial work was carried out under the direction of the Port Health Inspector.

The following tables show details of rats destroyed on board ship and in the quayside sheds and other premises within the dock areas :—

ON BOARD FOREIGN-GOING SHIPS.

Method of Destruction			Infected Ports				Non-Infected Ports				Total
			R. Rattus		R. Norvegicus		R. Rattus		R. Norvegicus		
			M.	F.	M.	F.	M.	F.	M.	F.	
H.C.N.	...	...	83	52	—	—	19	11	—	—	165
Trapping	...	...	33	23	—	—	3	1	—	—	60
			116	75	—	—	22	12	—	—	225

IN CARGO SHEDS AND OTHER PREMISES.

			Male	Female	Total
R. Rattus	...	...	24	16	40
R. Norvegicus	...	...	2	3	5
			<u>26</u>	<u>19</u>	<u>45</u>

INTERNATIONAL DERATTING AND DERATTING EXEMPTION CERTIFICATES.

The total number of certificates issued during the year was 363.

Deratting Certificates were issued to 18 ships, 11 after fumigation with H.C.N. gas and 7 after trapping operations. Deratting Exemption Certificates were issued to the remaining 345 ships.

Eighteen Exemption Certificates were issued to new ships at the request of the builders or shipping companies.

Twenty-seven certificates were issued to ships berthed at outlying quays at Ardrossan, Bowling, Finnart, Irvine, Old Kilpatrick and Troon.

PREVENTION OF DAMAGE BY PESTS ACT, 1949, AND APPLICATION TO SHIPPING ORDERS, 1951-56.

Rodent Control Exemption Certificates were issued to 31 coastal vessels during the year.

RAGS, HAIRS, HIDES AND BONES.

The following table shows the amount of imported rags, hairs, hides and bones with the country of origin :—

Country of Origin	Rags		Hairs (Various)		Hides (Various)		Bones	
	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles	No. of Ships	No. of Bundles
Aden ...	—	—	—	—	—	—	1	462
Africa ...	—	—	1	7	9	1,015	—	—
Australia ...	—	—	—	—	9	2,655	—	—
Belgium ...	—	—	2	112	—	—	—	—
Canada ...	—	—	1	10	1	15	—	—
Egypt ...	3	2,182	1	27	—	—	—	—
France ...	—	—	—	—	4	2,831	—	—
India ...	—	—	2	30	6	1,285	17	27,178
Ireland ...	50	4,148	1	7	3	877	1	13
Italy ...	—	—	—	—	2	770	—	—
Japan ...	—	—	—	—	8	7,550	—	—
New Zealand	—	—	—	—	1	249	—	—
Pakistan ...	—	—	4	42	1	68	4	5,185
South America	—	—	2	25	2	45	4	56,548
South Africa	—	—	—	—	4	213	1	13,220
Spain ...	1	12	—	—	—	—	5	5,200
Sweden ...	1	200	—	—	—	—	—	—
Syria ...	—	—	—	—	1	3	—	—
Trinidad ...	—	—	1	11	—	—	—	—
U.S.A. ...	6	114	6	304	3	10	—	—

PUBLIC HEALTH (IMPORTED FOODS) (SCOTLAND)
REGULATIONS, 1937-48.

The tonnage of imported foodstuffs showed a decrease during the year of 168,243 tons. There was also a very slight drop on coastwise cargoes amounting to 1,040 tons.

The heaviest condemnations were mainly consignments of fresh fruit, potatoes and grain cargoes, and in most instances were the result of water damage, bad stowage and poorly ventilated holds.

In one consignment of grain, 50 tons were condemned as a result of contamination by bone grist. Samples of grain were tested and found to be negative for anthrax bacilli and Salmonellae. The grain was released to be used for animal feeding.

On arrival at the granary wharf of a ship with a full cargo of white maize from Mexico, the body of a man was found on top of the maize in No. 3 hold. The body was removed by the police for post-mortem examination. Almost one ton of grain surrounding the area on which the body lay was scooped out and disposed of for animal feeding.

One-hundred and fifty tons of potatoes from seven shipments were condemned on discharge from the ships. Widespread decomposition rendered them totally unfit for any purpose other than destruction.

Imports of desiccated coconut from Ceylon continue to maintain a high standard of purity and no *Salmonellae* were reported from 494 samples submitted for testing.

Two consignments of American hen egg albumen revealed *Salmonellae* from samples submitted. Both of these consignments were sent to Edinburgh for heat treatment under supervision of the Food Inspector for Edinburgh.

Part of a consignment of flour from Canada was found to be contaminated by sulphuric acid. All sacks of flour showing any trace of contamination were set aside and a total of 52 ($\times 140$ lb.) sacks of flour were condemned and destroyed under supervision.

Another shipment of flour from Canada was contaminated with bichromate of soda and 20 tons of flour were sold for industrial purposes to a Falkirk firm to be used in the manufacture of starch products.

A composite sample of Australian flour was found to show an excess in chalk content. The matter was taken up with the firm of importers who agreed to inform the buyer in Australia.

Two consignments of Chilli powder from South Africa were found to contain "Sudan G," a non-permitted colouring matter. The attention of the importer was drawn to this infringement and the consignments were returned to South Africa.

Chestnuts from Portugal were detained on information received from another port that imports of these nuts recently received by them contained excess Afla-toxin. It is thought that this toxin was responsible for widespread disease among turkeys in recent years. Rodents fed with nut meal could also be affected if the nuts were contaminated by the mould *Aspergillus Flavus*. Samples were drawn from this consignment, and although various common moulds were present, no evidence of *Aspergillus Flavus* was reported. The nuts, however, were soft, mouldy and therefore unwholesome. The total consignment was surrendered for destruction.

PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD)
(SCOTLAND) REGULATIONS, 1962.

A trial sample of prunes in plastic containers from America was found to contain Sorbic Acid, a prohibited preservative which is not permitted in prunes. The attention of the importers was drawn to this matter and they surrendered the product for destruction.

Two shipments of Orange Juice in casks were found to contain excess preservatives to the extent of 917 parts per million and 725 parts per million respectively. The importers each gave an undertaking confirming that their products would conform to the requirements of the Regulations before sale to the public for human consumption.

OFFICIAL CERTIFICATES.

A new problem has arisen with consignments of bulk lard from Continental ports in France, Belgium and Holland.

In the past, shipments of lard from these countries were accompanied by the Official Certificate of the country of origin.

Supplies of bulk lard are now being received at Channel ports, e.g., Antwerp, Amsterdam, Rotterdam and Schiedam, where they can be bulked into receptive tanks in the dock areas. As a result of this procedure, consignments of bulk lard are being shipped to Great Britain and Northern Ireland either having lost their identity of origin or accompanied with a mass of documentation.

The position at Belgian ports has been clarified to some extent with the Belgian Authorities accepting responsibility for all consignments from adjacent countries by covering all dock-bulked exports of lard with a Veterinary Certificate from the Belgian Port Veterinary Authorities.

Holland, however, will only cover consignments of home origin and will not be responsible for bulk lard from any neighbouring countries.

It is expected that satisfactory arrangements will soon be made by the Ministry of Food and the Veterinary Authorities of the exporting countries, and the storage, pumping and loading of bulk lard will be covered by the issue of a single Official Certificate by the supervising Veterinary Authority at the various ports.

A consignment of Corned Beef from South Africa with no Official Certificates was detained pending arrangements being made to re-export to South Africa.

The following tables show the amount of foodstuffs imported during the year :—

FOREIGN IMPORTS, 1966.

TABLE "A."

Article	Weight		Article	Weight	
	Tons.	Cwts.		Tons.	Cwts.
Acids	6	9	Honey	354	8
Apples (Dehydrated)	6	10	Indian Provisions ...	43	14
Apples (Fresh) ...	5,341	1	Jams and Jellies ...	119	3
Apricots (Fresh) ...	6	10	Lard	483	7
Bakers' Sundries ...	3	6	Lemons	770	14
Barley	13,061	—	Lentils	3,439	7
Beans	1,813	4	Macaroni	326	4
Brandy	631	19	Maize	106,752	18
Butter	15,085	11	Malt	11,714	—
Cake	7	—	Meals	352	—
Cakemix	15	2	Meat (Canned) ...	3,356	9
Casein	201	10	Meat (Preserved) ...	14	15
Cheese	4,039	8	Melons	1,795	4
Cherries	282	6	Milk Powder	837	17
Chicken (Canned) ...	492	16	Milo	18,437	—
Chicken (Frozen) ...	2	8	Nuts	409	4
Chinese (Prov.) ...	57	—	Oats	1,370	—
Chocolate (Couverture)	27	—	Oils	313	10
Chocolate (Crumb) ...	1,511	—	Onions	2,202	17
Chutney	11	—	Onions (Canned) ...	1	5
Cinnamon Bark ...	10	—	Onions (Dehydrated)	10	—
Cocoa Beans	1,218	15	Onions (Kibbled) ...	3	10
Coconut (Desiccated)	1,372	15	Oranges	16,728	7
Coconut (Fresh) ...	31	3	Pears (Fresh)	570	9
Coconut (Oil)	11	13	Peas	8,048	1
Coffee	86	10	Peel (Various)	101	10
Condiments	4	2	Pepper	6	12
Confectionery	30	1	Pickles	210	10
Corn	336,840	15	Plum Pudding	6	8
Corn (Canned)	503	8	Pomegranates	323	15
Corn (Starch)	42	17	Potatoes	17,645	7
Crispbread	71	13	Potatoes (Dried) ...	50	—
Egg (Albumen)	66	6	Potatoes (Canned) ...	84	13
Egg (Dried)	10	7	Potatoes (Instant) ...	35	5
Egg (Frozen Whole) ...	125	—	Potatoes (Powder) ...	1	16
Egg (Powder)	2	—	Rice	3,630	13
Egg (Spray)	2	—	Rum	304	14
Fats	146	—	Sago	67	—
Fish (Canned)	1,383	2	Salad Dressings	5	13
Fish (Dried)	2	7	Sauces	28	17
Fish (Shell)	42	19	Sausages (Canned) ...	2	4
Flavourings	—	10	Seasonings	8	15
Flour	35,279	5	Seaweed	132	—
Food Beverage	1	19	Soups	71	—
Fruit (Canned)	35,937	2	Soups (Stock)	66	8
Fruit (Dried)	6,002	8	Soya Beans	500	—
Fruit (Juice)	3,015	6	Spaghetti	—	1
Fruit (Pie Filling) ...	34	5	Spices	2	19
Fruit (Preserved) ...	14	5	Starch	10	—
Fruit (Pulp)	893	8	Sugar	1,615	—
Fruit (Skins)	52	1	Syrup	12	1
Ginger	498	10	Tapioca	216	5
Glucose	90	6	Tea	1,083	18
Grapefruits	1,773	14	Tomatoes (Canned) ...	541	16
Grapes	114	8	Tomatoes (Flakes) ...	11	4
Ham (Canned)	3	7	Tomatoes (Juice) ...	522	2

FOREIGN IMPORTS, 1966—*Continued.*TABLE "A"—*Continued.*

Article	Weight Tons. Cwts.		Article	Weight Tons. Cwts.	
Tomatoes (Powder) ...	340	3	Vegetables (Dried) ...	29	6
Tomatoes (Puree and Paste) ...	395	7	Vegetables (Fresh) ...	817	7
Turkey (Canned) ...	1	10	Vegetables (Preserved) ...	61	15
Turkey (Frozen) ...	2	16	Wheat ...	90,242	—
Vegetables (Canned) ...	487	11	Whisky ...	160	3
Vegetables (Colouring) ...	1	4	Wine ...	3,914	7
Vegetables (Dehydrated) ...	66	19	Yeast ...	9	6

Total Weight—770,598 tons, 10 cwts.

COASTWISE IMPORTS, 1966.

TABLE "B."

Article	Weight Tons Cwts.		Article	Weight Tons Cwts.	
Aerated Waters ...	6	3	Liqueurs ...	—	9
Apples (Fresh) ...	61	4	Meal ...	2	—
Bakers' Sundries ...	—	2	Meat (Canned) ...	245	7
Barley ...	2	11	Meat (Cooked) ...	91	7
Beer ...	2,366	7	Mince-meat ...	—	4
Biscuits ...	14	—	Onions ...	17	6
Blackberries (Fresh) ...	18	11	Pastry ...	—	2
Brandy ...	—	2	Peas ...	5	2
Butter ...	236	2	Potatoes ...	19	19
Cereals ...	—	8	Potato (Crisps) ...	—	3
Cheese ...	46	16	Potato (Flakes) ...	186	—
Chocolate (Couverture) ...	150	11	Potato (Powder) ...	1	7
Chocolate (Crumb) ...	380	17	Rice ...	—	1
Confectionery ...	5	9	Rum ...	—	7
Cornflakes ...	—	2	Salt ...	—	10
Eggs ...	240	5	Sauces ...	—	4
Farinaceous Foods ...	—	14	Sausages ...	6	7
Fats ...	90	14	Sconemix ...	—	1
Fish (Canned) ...	—	1	Seasonings ...	—	8
Fish (Pickled) ...	128	8	Shortbread ...	—	17
Flour ...	8	—	Soup ...	10	18
Fruit (Canned) ...	90	6	Spices ...	—	14
Fruit (Dried) ...	3	1	Stout ...	6,037	9
Fruit (Pulp) ...	31	15	Strawberries (Fresh) ...	1	11
Gammons ...	105	13	Tea ...	22	8
Gin ...	1	1	Tomatoes (Fresh) ...	1	5
Ginger ...	—	2	Tongues (Canned) ...	1	6
Grapes ...	16	—	Vegetables (Canned) ...	70	5
Haggis ...	—	1	Vegetables (Flakes) ...	3	18
Ham and Bacon ...	3,505	3	Vegetables (Fresh) ...	60	1
Ham and Chicken ...	1	—	Wheat ...	—	18
Hamburgers (Frozen) ...	2	—	Wheat Starch ...	30	—
Honey ...	—	3	Whisky ...	100	14
Jams and Jellies ...	2	4	Wine ...	5	11
Lard ...	15	19			

Total Weight—14,556 tons, 14 cwts.

The following foodstuffs were found unfit for human consumption and disposed of to the satisfaction of the Port Medical Officer :—

Article	Weight Cwts. Qrs.		Article	Weight Cwts. Qrs.	
Apples	45	—	Malt	83	3
Beans	4	1	Meat	41	2
Butter	2	3	Melons	—	2
Cheese	—	2	Nuts	33	—
Chicken (Canned) ...	22	—	Onions	246	2
Coconut (Desiccated) ...	1	2	Oranges	198	—
Corn	16,163	3	Pickles	—	2
Corn (Canned) ...	2	1	Plum Puddings ...	—	1
Crispbread	—	2	Potatoes	4,464	1
Fish (Canned) ...	4	2	Potatoes (Canned) ...	—	1
Fish (Shell)	—	1	Rice	19	3
Flour	461	—	Sauce	7	—
Fruit (Canned) ...	1,234	2	Soup	1	3
Fruit (Dried)	103	3	Syrup	1	2
Fruit (Juice)	98	1	Tapioca	—	1
Fruit (Pie Filling) ...	6	2	Tomatoes (Canned) ...	8	—
Fruit (Pulp)	36	—	Tomatoes (Juice) ...	22	—
Ginger	2	—	Tomatoes (Paste and Puree)	2	3
Grapefruits	4	1	Tomatoes (Pulp) ...	2	3
Honey	3	1	Vegetables (Canned) ...	19	—
Jams and Jellies ...	5	2	Vegetables (Fresh) ...	422	1
Macaroni	—	2	Wheat	965	3
Maize	19	2			

Total Weight—24,673 cwts. 2 qrs.

FOODSTUFFS EXAMINED BY CITY ANALYST.

Article	Fit for Human Consumption	Unfit for Human Consumption or not conforming to Regulations	Remarks
Acid	1	—	
Apples	3	—	
Bakers' Sundries ...	1	—	
Beans	9	3	Moulds ; oil contamination.
Butter	19	—	
Cake	2	—	
Cakemix	4	—	
Cheese	4	—	
Cherries	1	—	
Chicken (Canned) ...	15	—	
Chilli Powder	—	2	Non-permitted colouring.
Chinese Provisions ...	7	—	
Chocolate Crumb ...	1	—	
Chutney	2	—	
Cocoa Beans	1	—	
Coconut (Desiccated) ...	1	4	Rancid.
Coffee	2	—	
Confectionery	6	—	
Crispbread	2	—	
Dates (Fresh)	2	—	
Egg (Albumen)	43	—	
Fish (Canned)	14	—	
Fish (Shell)	18	—	
Flavourings	1	—	
Flour	15	1	Acid contamination.

FOODSTUFFS EXAMINED BY CITY ANALYST—*Continued.*

Article	Fit for Human Consumption	Unfit for Human Consumption or not conforming to Regulations	Remarks
Fruit (Canned) ...	113	6	Excess tin.
Fruit (Dried) ...	25	4	Moulds ; oil contamination.
Fruit (Juice) ...	22	3	Carbon dioxide ; excess pre- servative.
Fruit (Pie Filling) ...	7	—	
Fruit (Pulp) ...	3	—	
Ginger ...	3	—	
Glucose ...	1	—	
Honey ...	7	—	
Indian Provisions ...	3	—	
Jams and Jellies ...	5	—	
Lard ...	4	—	
Lentils ...	—	2	Moulds.
Macaroni ...	2	—	
Meat ...	55	—	
Milk Powder ...	3	—	
Onions (Kibbled) ...	1	—	
Oranges ...	1	—	
Nuts ...	10	—	
Pears (Fresh) ...	1	—	
Peas ...	3	—	
Peel ...	3	—	
Pickles ...	6	—	
Pomegranates ...	1	—	
Potatoes (Canned) ...	1	—	
Potatoes (Powder) ...	1	—	
Rice ...	3	2	Moulds ; extraneous matter.
Rum ...	5	—	
Salad Dressings ...	4	—	
Sauce ...	8	—	
Seasonings ...	22	2	Non-permitted colouring ; moulds.
Soup ...	4	—	
Tapioca ...	6	—	
Tea ...	24	21	Chemical contamination.
Tomatoes (Canned) ...	7	—	
Tomatoes (Juice) ...	3	—	
Tomatoes (Paste) ...	9	4	Excess tin.
Tomatoes (Powder)...	1	—	
Vegetables (Canned) ...	19	3	Excess tin.
Vegetables (Dried) ...	2	—	
Vegetables (Powder) ...	2	—	
Whisky ...	2	—	
Wine ...	5	—	
	581	57	

SAMPLES SUBMITTED TO CITY BACTERIOLOGIST

Article	Sound	Unfit	Remarks
Bakers' Sundries ...	1	—	
Butter ...	5	—	
Cakemix ...	4	—	
Chicken (Canned) ...	2	—	
Chicken (Frozen) ...	2	—	
Chinese Provisions ...	2	—	
Coconut (Desiccated) ...	494	—	
Confectionery ...	5	—	
Egg (Albumen) ...	403	5	Salmonella infection.
Fish (Shell) ...	16	—	
Fruit (Dried) ...	1	—	
Fruit (Juice) ...	1	1	Fermentation.
Indian Produce ...	1	—	
Lard ...	5	—	
Meat (Canned) ...	59	—	
Milk (Powder) ...	4	—	
Nuts ...	—	1	Moulds.
Onions (Canned) ...	1	—	
Pepper ...	1	—	
Salad Dressings ...	4	—	
Sauce ...	1	—	
Turkey (Frozen) ...	1	—	
Wheat ...	1	—	
	<u>1,014</u>	<u>7</u>	

PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS (SCOTLAND) 1937.

The following statement submitted by the Corporation Veterinary Inspector indicates the work done under the Foreign Meat Regulations during 1966 :—

EXAMINED.

<i>Beef—</i>				<i>Beef Offal—Continued</i>			
Quarters ...	...	...	3,851	Sweetbreads, cartons ...	...	400	
Cartons ...	...	...	111,614	Pancreas, cartons ...	...	500	
<i>Mutton—</i>				Casings, Tierces ...	...	384	
Carcases ...	...	...	3,510	Mixed Offal, Bags ...	...	356	
Sides ...	...	...	1,582	<i>Mutton Offal—</i>			
Cartons ...	...	...	2,086	Livers, cartons ...	...	12,378	
<i>Lamb—</i>				Kidneys, cartons ...	...	1,401	
Carcases ...	...	...	32,556	Casings, tierces ...	...	1,270	
<i>Veal—</i>				Mixed Offal, bags ...	...	345	
Cartons ...	...	...	100	<i>Lamb Offal—</i>			
<i>Kangaroo Meat—</i>				Livers, cartons ...	...	1,745	
Cartons ...	...	...	2,234	Mixed Offal, bags ...	...	303	
<i>Beef Offal—</i>				<i>Inedible Offal—</i>			
Tongues, cartons ...	...	...	181	For animal Feeding, cartons	...	54,140	
Livers, cartons ...	...	...	6,979	<i>Chicken Quarters—Cartons ...</i>			
Kidneys, cartons ...	...	...	666	<i>Turkey Rolls—Cartons ...</i>			

EXAMINATION FOR SALMONELLA IN IMPORTED BONELESS BEEF.

Eight hundred and thirty-one representative samples were taken. Fourteen of these were positive, of which 10 revealed the presence of *Salmonella typhimurium*, 2 *Salmonella bredeney* and 2 *Salmonella muenchen*. The 14 positive cartons were seized as unfit. The several parcels involved, namely, 507 cartons, were allowed to go for animal feeding after processing.

EXAMINATION FOR SALMONELLA IN IMPORTED
BONELESS KANGAROO MEAT.

Ten representative samples were taken. Two of these were positive, of which 1 revealed the presence of *Salmonella anatum* and 1 *Salmonella chester*. The 2 positive cartons were seized as unfit. The several parcels involved, namely, 187 cartons, were allowed to go for animal feeding after processing.

SECTION XII

HOUSING.

The total number of municipal houses completed during 1966 was 5,010. The following table shows the rate of completion since 1962 by the Corporation and the Scottish Special Housing Association :—

Year	Direct Labour	Con-tractors	Scottish Special Housing Assoc.	Total Municipal Houses from all Sources
1962	1,646	303	56	2,005
1963	2,299	865	328	3,492
1964	2,356	1,952	482	4,790
1965	2,014	2,145	601	4,760
1966	1,811	1,827	1,372	5,010

RENT ACT, 1957.

Return of applications made to the Local Authority during the year :—

Applications for Certificates	...	...	...	10
Of which—				
Granted ...	...	...	...	5
Refused ...	...	...	...	2
Cancelled ...	...	...	...	—
Outstanding	...	...	...	3
Applications for Revocation of Certificates	...			4
Of which—				
Granted ...	...	...	...	4
Refused ...	...	...	...	—
Cancelled ...	...	...	...	—
Outstanding	...	...	...	—

No other certificates were issued under the Act.

REHOUSING OF TUBERCULOUS FAMILIES.

TABLE I.

Year	Number of Families	
	Recommended	Rehoused
1934/45	3,764	1,484
1946/55	5,459	4,372
1956/62	2,164	2,121
1963	65	78
1964	63	69
1965	44	32
1966	53	34
	11,612	8,190

TABLE II.

Recommendations, 1934 to December, 1966	...	11,612
Number of Families Rehoused :—		
Rehousing ...	...	2,287
Intermediate ...	...	1,953
Ordinary } ...	...	3,449
Super Ordinary }	...	
City Factor's Houses and Others	...	179
Temporary Houses ...	...	322
Recommendations remaining but not yet Rehoused—		
Refused Offers ...	...	190
Did not reply ...	...	184
Gone away—Address unknown ...	...	508
Cancelled ...	...	905
Patient Deceased ...	...	1,592
Still to be dealt with ...	...	11,569
		43

TABLE III.

SUMMARY OF TUBERCULOUS FAMILIES REHOUSED SINCE 1934.

	1934/56	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	Total
1934/55 ...	6,400	39	5	11	8	—	1	1	—	—	—	6,465
1956 ...	—	159	11	3	1	1	—	—	1	—	—	176
1957 ...	—	297	155	24	11	4	4	—	—	—	—	495
1958 ...	—	—	138	115	37	6	1	1	—	—	—	298
1959 ...	—	—	—	86	100	17	2	—	—	—	—	205
1960 ...	—	—	—	—	78	66	3	4	—	—	1	152
1961 ...	—	—	—	—	—	86	51	13	4	—	—	154
1962 ...	—	—	—	—	—	—	57	30	3	—	—	90
1963 ...	—	—	—	—	—	—	—	29	20	2	—	51
1964 ...	—	—	—	—	—	—	—	—	41	11	—	52
1965 ...	—	—	—	—	—	—	—	—	—	19	17	36
1966 ...	—	—	—	—	—	—	—	—	—	—	16	16
	6,400	495	309	239	235	180	119	78	69	32	34	8,190

SECONDARY PRIORITY SCHEME.

During 1966, 451 recommendations were made under the scheme.

This figure in no way represents the amount of work involved in investigating and assessing the thousands of applications received by the Department.

DETERIORATION OF PROPERTY.

During the year 2,487 dwellings were represented by the Medical Officer of Health to the Housing Committee as uninhabitable. The wastage of houses over the last ten years is shown in the following table :—

Year	Closing Order	To be Rendered Fit for			Total
		Demoli- tion Order	Human Habi- tation	Slum Clear- ance	
1957-61	3,887	4,727	12	*1,381	9,764
1962	841	971	—	—	1,812
1963	1,149	797	—	—	1,946
1964	929	1,053	—	—	1,982
1965	1,019	1,060	—	—	2,079
1966	1,194	1,293	—	—	2,487
	<u>9,019</u>	<u>9,901</u>	<u>12</u>	<u>*1,381</u>	<u>20,070</u>

*Includes 243 houses previously dealt with by Closing and Demolition Orders.

The number of houses condemned by the Master of Works as dangerous in 1966 was 750.

SUPERVISION OF TENANTS IN HOUSING SCHEMES.

The development of this important branch of the Department's work from its inception in 1923 was fully reviewed in this section of the 1957 Annual Report.

This service, which was extended in 1956, now includes—

1. The visitation of new schemes as they are occupied, e.g., Castlemilk, Arden and Easterhouse.
2. Visits to new houses where the tenants are in residence and having difficulties.
3. The visitation of backward and feckless families about to be rehoused, including families who are overcrowded and have long-standing applications.

Details of the number of visits paid to houses in the various schemes (Ordinary and Intermediate), and the conditions found, are shown in the Appendix Table XV General Sanitary Operations (Section 30).

*Supervision of Tenants in Housing Schemes**(a) Condition as to Cleanliness*

A total number of 66 houses were demolished in Dobbie's Loan and Clydeferry Street during the year and the number of houses in the various rehousing schemes now reported on is therefore 14,923.

No. of tenants under supervision at 1st January, 1966	...	14,721
Of which evicted or left owing rent during 1966	...	332
Of which left voluntarily during 1966	... ..	586
		918
Of which remaining as at 31st December, 1966	... ..	13,803
No. of tenants obtaining entry during 1966	... ..	890
Total number of tenants remaining as at 31st December 1966	...	14,693

At the beginning of the year, 14,787 households were under supervision and at the end of the year, 14,693. The number of new tenants was 890. There were 918 removals or 6.2 per cent. of the total occupancies.

The changes in the condition of the 13,803 households under supervision throughout the whole year were as follows :—

Condition at beginning of Year—				Group Percentages	Condition at end of Year			
					Clean	Fair	Dirty	Total
Clean	...	...	9,363	67.9	9,148	206	1	9,355
Fair	...	...	4,286	31.0	312	3,957	26	4,295
Dirty	...	...	154	1.1	1	69	83	153
			13,803	100.0	9,461	4,232	110	13,803
Group Percentages					68.5	30.7	0.8	100.0

A similar table is given for the 890 tenants who obtained entry during the year and were still resident in the schemes at the close :—

Condition at date of entry—				Group Percentages	Condition at end of Year			
					Clean	Fair	Dirty	Total
Clean	...	...	405	45.5	237	164	4	405
Fair	...	...	475	53.4	17	454	4	475
Dirty	...	...	10	1.1	—	6	4	10
			890	100.0	254	624	12	890
Group percentages					28.6	70.2	0.2	100.0

The condition, prior to removal, of the houses occupied by families who were evicted or left owing rent, and by tenants removing voluntarily during the year, is compared in the following table :—

Condition at date of removal—				Tenants Evicted during 1966		Tenants Removing voluntarily during 1966	
				Number	Group Percentages	Number	Group Percentages
Clean	...	...	...	88	26.5	426	72.7
Fair	...	...	...	229	69.0	157	26.8
Dirty	...	...	...	15	4.5	3	0.5
				<u>332</u>	<u>100.0</u>	<u>586</u>	<u>100.0</u>

(b) *Bug Infestation*

Of the 14,923 houses under supervision, only 3 (0.02 per cent.) were found to contain any evidence of bug infestation.

PROGRESS OF BUG INFESTATION PREVENTION IN REHOUSING SCHEMES.

Year	Number of Houses Inspected	Number of Houses in which Bed Bugs were found				Percentage of Total Number of Houses			
		Trace	M.I.	S.I.	Total	Trace	M.I.	S.I.	Total
1934-38 ...	60,141	933	1,108	1,829	3,870	1.55	1.84	3.04	6.43
1939-43 ...	73,529	244	314	688	1,246	0.33	0.43	0.93	1.69
1944-48 ...	73,845	150	119	537	806	0.20	0.16	0.73	1.09
1949-53 ...	74,001	68	164	335	567	0.09	0.22	0.45	0.77
1954 ...	14,925	14	28	24	66	0.09	0.19	0.16	0.44
1955 ...	14,925	12	16	38	66	0.08	0.11	0.25	0.44
1956 ...	14,925	5	30	12	47	0.03	0.20	0.08	0.31
1957 ...	14,925	2	5	20	27	0.01	0.03	0.14	0.18
1958 ...	14,925	4	14	9	27	0.03	0.09	0.06	0.18
1959 ...	14,965	—	18	5	23	—	0.12	0.03	0.15
1960 ...	14,965	4	6	7	17	0.03	0.04	0.05	0.11
1961 ...	14,965	5	14	8	27	0.03	0.09	0.05	0.18
1962 ...	14,989	2	3	3	8	0.01	0.02	0.02	0.05
1963 ...	14,989	1	—	—	1	0.01	—	—	0.01
1964 ...	14,989	—	2	—	2	—	0.01	—	0.01
1965 ...	14,989	—	—	1	1	—	—	0.01	0.01
1966 ...	14,923	—	2	1	3	—	0.01	0.01	0.02

Trace—Old hatched eggs or bug casts only.

Medium Infestation (M.I.)—Live bugs or eggs on furnishings only.

Serious Infestation (S.I.)—Live bugs or eggs on furnishings and in structure of buildings.

DISINFESTATION UNIT.

The work of the Unit has been maintained at the same level, the total number of apartments treated varying little from previous years.

The following table shows the amount of work carried out in each Division :—

TABLE I.

			Number of Apartments Treated				
Division			Bug Infestation	Tenants being Rehoused	Cockroach Infestations	Other Insects	Total
Central	...	...	20	8	105	401	534
Northern	...	...	72	512	137	682	1,403
Eastern	...	...	129	19	75	809	1,032
South-Eastern	...	...	27	53	52	359	491
South-Western	...	...	33	12	90	263	398
			<u>281</u>	<u>604</u>	<u>459</u>	<u>2,514</u>	<u>3,858</u>

Rehousing.—Once again the number of apartments treated shows a slight decrease on the previous year. This trend will continue and is due to the work of this Unit over the past twenty years and also the demolition of many old properties.

Other Insects.—This part of the Unit's work has followed the same pattern as in previous years, showing a considerable increase in the number of visits, although the total number of apartments treated remains about the same. The most common complaints under this heading are spider beetles, dermestes beetles, earwigs, book lice, and plaster beetles. Each year a large number of complaints are received of infestations by the common furniture beetle (*Anobium Punctatum*), but in these cases advice only is given, no treatment being carried out by the Unit. Many of these visits take up a great amount of time which cannot be shown by statistics.

The following table shows the amount of work carried out in each Division in respect of other infestations.:—

TABLE II.

Division			Verminous Bedding	Flea Infestation	Fly Infestation	Other Insects	Total
Central	...	...	38	247	9	107	401
Northern	...	...	21	496	17	148	682
Eastern	...	...	19	584	34	172	809
South-Eastern	...	...	10	207	12	130	359
South-Western	...	...	11	151	15	86	263
			<u>99</u>	<u>1,685</u>	<u>87</u>	<u>643</u>	<u>2,514</u>

Insect Identification.—For the identification of insects the services of the Unit were requested on 85 occasions. Most of the requests came from members of the public, district sanitary inspectors, housing management officers or other local authorities. Once again the Unit would like to record its sincere thanks to the staff of the Zoology Department, Glasgow University, for the help so willingly given throughout the year.

Other Premises.—In addition to the work shown in the previous tables, 309 treatments of other premises (restaurants, shops, schools, clinics, factories, etc.) were carried out for numerous kinds of insect pests. During the months May to October, two additional operators were employed for fly control, and 3,301 treatments of ashbin shelters, stables and piggeries were carried out.

Following requests from the Police, City Factor and householders, the Unit successfully dealt with 85 wasp nests which were either on or in close proximity to houses, schools, nurseries, etc.

The following table shows the number of visits made during the year for all types of infestation :—

TABLE III.

Bug Infestation and Rehousing	...	...	966
Cockroach Infestation	...	...	1,041
Verminous Bedding	...	...	187
Flea Infestation	...	...	898
Fly Infestation	...	...	165
Other Insect Infestation	...	...	1,067
			4,324

Insecticides.—Each year many new insecticides arrive on the market, but D.D.T., Lindane Pybuthrin and Vapona strips are still giving excellent results.

SECTION XIII

WESTERN REGIONAL HOSPITAL BOARD.

THE CITY LABORATORY.

An expression which has recently gained favour with commentators on the contemporary scene is "non-event". It presumably means something which had been expected to happen but did not materialise and, although generally used in a pejorative sense, it is sometimes invested with the aura of a "happening"—another of modern Grub Street's favourite jargon-words—something deserving of our attention if not admiration. Practical men may find such notions over-fanciful, but if what had been expected had also been dreaded, then even the most phlegmatic among us can savour a "non-event". Thus, one supposes, fire-brigades, lifeboatmen and the police must have a preference for "non-fires", "non-shipwrecks" and "non-crime" and, in the same way, those of us whose business it is to minister to the health of the individual and the community can feel truly pleased only when the "events" with which we are trained to deal fail to happen.

However, every craftsman likes to exercise his skill and, to be honest, a bacteriologist finds positive results rather satisfying. To find the cause of a typhoid epidemic in a tin of corned-beef and, by subtle microbiological sleuthing, to track it to its squalid source on a river-bank in a distant continent can be a most rewarding achievement. How dull, in comparison, to examine hundreds of samples and find nothing wrong! But, at the end of the day, it is the negative examinations which have best served the public interest.

Judged in this light, 1966, though largely a year of "non-events", was nevertheless a busy year at the City Laboratory. If, mercifully, no epidemics of note occurred, if the community as such had to endure no particular microbial mischief, there were, as always, plenty of lone sufferers from infectious and other diseases who had need of laboratory aid, as did those who, by their continuous vigilance over our communal environment, keep the food we eat and the water we drink as free of taint as possible. Thus, the total number of examinations performed during the year, 174,213, was only marginally (480) smaller than in 1965.

Before proceeding to take a closer look at the work done, mention must be made of further Staff changes that occurred during the year. In September, Dr. Morag Timbury was appointed Senior Lecturer at the Institute of Virology in the University of Glasgow and was

succeeded as Deputy Director by Dr. Matthew Laidlaw; and in December Mrs. Elaine McLaren, B.Sc., Assistant (Non-Medical) Bacteriologist, left to take up a lectureship at David Dale College; the appointment of her successor was still pending at the close of the year.

COMMUNICABLE DISEASES—EPIDEMIOLOGICAL INVESTIGATIONS.

Bacterial infections of the Pharynx.—For the second year in succession *C.diphtheriae* was not once isolated. This is no longer a matter for comment; it is the rare positive case that is considered newsworthy nowadays and the fact that such cases do occur from time to time explains why not a day passes without one or two swabs being examined with diphtheria in mind. There were 505 such swabs in 1966, almost as many as in the previous year.

There was a further drop in the number of swabs from which *Strep.pyogenes* was isolated—93 out of 539 examined (17.3 per cent.), compared with 164 out of 753 (21.8 per cent.) in the previous year. The percentage of the tetracycline-resistant strains among them, however, was 47.3 per cent., more than double what it was the year before. It is to be hoped that this increased resistance-rate will be heeded by those who tend too readily to prescribe broad-spectrum antibiotics, because there have been a number of disquieting reminders lately that the epidemic potential of the haemolytic streptococcus is far from spent.

The number of swabs showing evidence of *Vincent's Infection* of the mouth or throat was 23 out of 511 examined; this compared with 9 out of 422 examined in 1965. The incidence of this infection thus remains gratifyingly low.

Staphylococcal Infections.—Only 92 strains of *Staph.aureus* were isolated from nose and throat swabs and other specimens (sputa, various pus swabs, etc.) and 63 per cent. of these (compared with 64.6 per cent. in 1965) were penicillin-resistant.

Glandular Fever.—This diagnosis was established in 10 out of 39 patients whose sera were submitted for the Paul-Bunnell Test. The corresponding figures for the previous year were 15 and 49.

Undulant Fever.—In 1966, as in the previous year, remarkably few specimens were received from cases with a suspected diagnosis of brucellosis and of the 5 sera examined none showed a significant titre of agglutinins. But, in an endeavour to trace the source of infection of cases diagnosed elsewhere, a number of milk samples were tested

and further reference to these will be found in the appropriate section of this Report.

Enteric Fever.—After the unusually large numbers of examinations for evidence of enteric infections undertaken in the previous two years (the reasons for which have been fully explained in previous Annual Reports) these dropped to average levels in 1966. They totalled 409 (288 of them being repeat specimens). *S.typhi* was isolated on ten occasions—from two immigrant patients and from eight previously known carriers.

S.paratyphi B was isolated from one known carrier and 11 new cases, none of them, it seemed from the information supplied to the Laboratory, particularly ill. Infection with this organism nowadays more frequently presents as a non-invasive salmonellosis than the classical enteric fever syndrome, indeed the so-called “cases” are often merely symptomless excretors, who, though not themselves in need of medical care, engage the attention of the epidemiologist, particularly if their work involves the handling of food or drink.

Logically, of course, the same consideration should apply to all food-handlers, not just those who have accidentally come under surveillance through illness or because of known contact with infection. This, it must be admitted, would pose formidable practical difficulties, and perhaps the best that can be aimed at for the present is to earmark for special attention persons in selected categories of employment. On this basis, and bearing in mind the misfortune which so recently befell Zermatt, priority must be given to the screening of workers engaged in the distribution of public water supplies. Thus 78 specimens of blood and 131 of faeces—more than twice as many as in the previous year—were received from the City Water Department's employees, and examined for evidence of enteric infection. They all gave negative results.

Food Poisoning due to other Salmonellae.—The number of specimens received from cases of suspected salmonella food poisoning increased from 8,641 in 1965 to 12,960 in the year under review and the suspicion was confirmed in 74 cases. Repeat specimens from some of these continued to yield positive results for varying periods and this accounted for a total of 174 isolates, compared with 129 from 59 cases in the previous year. As usual, *S.typhimurium* was the serotype most commonly encountered, but its predominance was not so marked as it had been in recent years; it was the causative organism in 24—32·4 per cent.—of the new cases, whereas in the preceding quinquennium the corresponding percentage varied between 57 and 75. Other serotypes

hitherto regarded as uncommon, notably *S. infantis*, isolated from 22 cases, made their presence increasingly felt, a reflection perhaps of changes in agriculture and in the nature and sources of our imports, but there were no "newcomers" among the types in 1966 as will be seen from the accompanying table which gives the details of all salmonellas isolated in this Laboratory (from Glasgow cases) during the last twelve years.

	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955
<i>S. typhimurium</i>	24	44	68	35	52	70	93	73	40	92	123	122
<i>S. enteritidis</i> ...	6	—	1	4	—	—	—	8	3	1	2	10
<i>S. enteritidis</i> var.												
<i>jena</i> ...	—	6	—	—	—	15	—	—	—	—	—	—
<i>S. newport</i> ...	—	—	—	—	—	—	1	—	—	4	—	8
<i>S. thompson</i> ...	—	—	—	—	—	—	—	1	2	—	—	25
<i>S. potsdam</i> ...	—	—	—	—	—	—	—	—	—	1	—	—
<i>S. saint-paul</i> ...	—	—	1	—	—	—	—	—	—	5	—	—
<i>S. montevideo</i> ...	—	—	—	—	—	—	1	—	—	—	—	—
<i>S. bovis</i>												
<i>morbificans</i>	—	—	2	1	1	—	—	1	—	1	1	1
<i>S. san diego</i> ...	—	—	—	—	—	—	—	—	1	—	1	—
<i>S. senftenberg</i> ...	—	—	—	—	—	—	—	—	—	1	—	—
<i>S. bredeney</i> ...	—	—	—	—	1	—	—	—	—	—	—	—
<i>S. stanleyville</i> ...	—	—	—	—	4	1	—	—	—	—	—	—
<i>S. anatum</i> ...	2	2	3	3	—	—	—	—	—	—	1	—
<i>S. stanley</i> ...	6	—	—	—	28	—	4	—	—	2	—	—
<i>S. waycross</i> ...	—	—	—	—	—	—	—	—	—	—	1	—
<i>S. cholerae</i> suis												
(var. <i>Kunzen-</i>												
<i>dorf</i>) ...	—	—	—	2	—	—	—	—	—	—	—	—
<i>S. cholerae</i> suis												
(var. <i>American</i>												
<i>type</i>) ...	—	—	—	—	—	—	1	—	1	—	—	—
<i>S. derby</i> ...	—	—	—	—	—	3	1	2	—	—	—	1
<i>S. muenchen</i> ...	—	—	—	—	—	—	—	—	—	—	—	1
<i>S. heidelberg</i> ...	4	—	—	—	1	1	—	7	—	—	2	1
<i>S. oranienberg</i> ...	—	—	—	—	—	—	1	—	—	—	—	1
<i>S. litchfield</i> ...	—	—	—	—	—	—	—	—	—	—	1	—
<i>S. unidentifiable</i>	—	—	—	—	—	2	—	—	—	—	—	—
<i>S. give</i> ...	—	—	—	—	—	—	—	—	—	1	—	—
<i>S. panama</i> ...	1	—	2	—	—	—	—	—	4	—	—	—
<i>S. vancouver</i> ...	—	—	—	—	—	—	—	5	—	—	—	—
<i>S. dublin</i> ...	3	2	—	—	—	—	—	1	—	—	—	—
<i>S. bleedon</i> ...	—	—	—	—	—	—	—	1	—	—	—	—
<i>S. meleagridis</i>	—	—	—	—	—	—	2	—	—	—	—	—
<i>S. hvittingfoss</i>	—	—	—	—	—	2	1	—	—	—	—	—
<i>S. loma-linda</i> ...	—	—	—	—	—	—	1	—	—	—	—	—
<i>S. infantis</i> ...	22	2	10	3	2	2	—	—	—	—	—	—
<i>S. cubana</i> ...	—	—	—	—	1	—	—	—	—	—	—	—
<i>S. bareilly</i> ...	—	—	—	—	1	—	—	—	—	—	—	—
<i>S. ibadan</i> ...	—	—	—	1	—	—	—	—	—	—	—	—
<i>S. blockley</i> ...	—	—	—	1	—	—	—	—	—	—	—	—
<i>S. essen</i> ...	—	—	—	1	—	—	—	—	—	—	—	—
<i>S. chester</i> ...	—	—	1	—	—	—	—	—	—	—	—	—
<i>S. london</i> ...	—	—	1	—	—	—	—	—	—	—	—	—
<i>S. congo</i> ...	—	—	14	—	—	—	—	—	—	—	—	—
<i>S. livingston</i> ...	—	1	—	—	—	—	—	—	—	—	—	—
<i>S. budapest</i> ...	6	1	—	—	—	—	—	—	—	—	—	—
<i>S. decatur</i> ...	—	1	—	—	—	—	—	—	—	—	—	—
	74	59	103	51	91	96	106	99	51	108	132	170

Out of 231 specimens received from Stirlingshire, 27 yielded a growth of *S.typhimurium* but 3 of these were from dogs, 7 from cattle and 2 from sewer swabs, which were examined in the course of the epidemiological investigation of a small outbreak of human salmonellosis.

Food Poisoning due to other organisms.—*Staph.aureus* was isolated from 6 out of 53 stool specimens from patients with acute gastro-enteritis and heat-resistant *Cl.welchii* from 1 out of 50 such specimens in which it was sought.

Foodstuffs suspected of having caused Food Poisoning.—All too often, by the time the victims of attacks of food poisoning—especially when caused by salmonellas—have developed symptoms, none of the suspected food is available for examination. But a diligent search is always made for any meal remnants which might provide a clue to the source of the infection, and very often the merest morsel will suffice. For instance, when a few people in different areas of the City developed acute gastro-enteritis on the same day during the summer, the common factor which linked together these otherwise unrelated individuals was that, a few hours before they sickened, they had all eaten cream trifles bought at the same shop. But this association did not become apparent till the next day, and by that time no trifles remained uneaten in the affected households. However, from one house a keen Food Inspector—an *honest* Autolytus he!—managed to retrieve a plastic carton which had contained a trifle but which the patient-to-be, with unsuspecting relish, had scraped clean the day before. This was very carefully examined and, from minute traces of material clinging to the plastic, an abundant growth of *Staph.aureus* was obtained. The same organism was isolated from further samples of the trifle procured subsequently and from the nasal and skin swabs of staff members at the shop. This and other incidents accounted for the isolation of *Staph.aureus* from 20 out of 70 food samples examined. A growth of heat-resistant *Cl.welchii* was obtained from 2 out of 55 samples but no salmonella was found in any of the 79 foods examined for this purpose.

Ten similar samples were examined for Stirlingshire Health Authority, all with negative results.

Dysentery.—The number of new cases of bacillary dysentery diagnosed bacteriologically during the year was 1,104, almost exactly the same as in the previous year and not significantly different from

the annual totals in each of the last three years. The details, with the corresponding figures for 1965 in brackets, are shown in the table :—

	Specimens	No. Positive	Percentage Positive
From suspected cases and contacts	8,054 (9,605)	1,104 (1,130)	13·7 (11·76)
From repeat specimens for clearance	6,842 (6,789)	713 (663)	10·4 (9·7)
	<u>14,896 (16,394)</u>	<u>1,817 (1,793)</u>	<u>12·2 (10·9)</u>

Sh.sonnei accounted for 73·5 per cent. of the new cases, those due to *Sh.flexneri* decreasing slightly from 31·3 per cent. in the previous year to 26·5 per cent. in 1966. Thus the expected peak in the Flexner/Sonne ratio did not occur ; nevertheless there is some suggestion of periodicity in this ratio as the figures for the last seven years show :—

	1960	1961	1962	1963	1964	1965	1966
Flexner/ /Sonne ...	1·64 /1	0·44 /1	0·13 /1	0·16 /1	0·22 /1	0·46 /1	0·36 /1

The following table records the infecting organisms in all the Glasgow cases of bacillary dysentery diagnosed at this Laboratory in each of the post war years :—

Year	Sonne	Flexner	Newcastle	Boyd	Schmitz	Total
1946 ...	111	109	49	—	—	289
1947 ...	66	18	21	—	—	105
1948 ...	434	383	3	—	—	820
1949 ...	501	373	1	—	1	826
1950 ...	1,865	105	—	—	—	1,970
1951 ...	949	40	—	—	—	989
1952 ...	1,779	11	3	—	—	1,793
1953 ...	1,694	272	—	—	—	1,966
1954 ...	2,524	1,754	—	—	—	4,278
1955 ...	2,763	1,484	—	—	—	4,247
1956 ...	2,388	309	—	—	—	2,697
1957 ...	1,830	190	—	—	—	2,020
1958 ...	1,556	268	5*	—	—	1,829
1959 ...	1,805	554	67*	1	—	2,427
1960 ...	864	839	582*	—	—	2,285
1961 ...	1,153	230	282*	—	—	1,665
1962 ...	1,385	85	101*	—	—	1,571
1963 ...	923	124	21*	—	—	1,068
1964 ...	1,110	119	131*	—	—	1,360
1965 ...	776	197	157*	—	—	1,130
1966 ...	811	236	57*	—	—	1,104

* Newcastle/Manchester type.

The Stirlingshire figures were also very similar to those in the previous year ; *Sh.sonnei* was isolated from 19 out of the 221 specimens received.

Amoebic Dysentery.—There was a slight increase, from 63 in the previous year, to 85 in the number of requests for the examination of stool specimens for *E.histolytica* (3 of them from Stirlingshire). The results were all negative.

Venereal Diseases.—As always, this group of diseases accounted for a sizeable proportion of the Laboratory's work. There was, however, a decrease, from 18,395 in the previous year, to 15,014 in the number of sera received for screening tests for syphilis, but a slight increase, from 3,400 to 3,528, in the number of requests for extended tests. The First Interim Report of the Working Party on the Laboratory Diagnosis of Venereal Diseases, set up by the Epidemiology Sub-committee of the Scottish Advisory Committee on Laboratory Services, appeared during the summer of 1966 and, as the present writer happened to be the Convener of the Working Party and had been entrusted with the task of drafting its Report, the recommendations made were quickly implemented at this Laboratory. One of these recommendations was that all laboratories at which serological tests for syphilis are undertaken should adopt a uniform dual screening policy based on the Cardiolipin Wassermann Reaction (performed by the "Whitechapel" technique) and the V.D.R.L. slide test. Accordingly the former (which in this Laboratory had hitherto been used as a "second-line test") was in September substituted for the Standard W.R. and, in November, the latter replaced Price's Precipitation Reaction, as routine screening tests.

Of the 15,014 sera "screened", 10,047 (about one thousand fewer than in 1965) were routine specimens from pregnant women—6,255 from antenatal clinics, 3,792 sent by general practitioners—and 0.16 per cent. of them gave presumptive positive results, but when these were examined more fully by more specific tests, three-quarters of them could be confidently dismissed as Biologic False Positives (which revert to negative post-natally) leaving 0.04 per cent. in which a syphilitic aetiology, either congenital or acquired, had to be inferred.

The remaining 3,528 sera, submitted for a variety of clinical reasons, were all examined by the same methods as those used for the "screen-positive" specimens *i.e.* by the *quantitative* V.D.R.L. test, the Reiter Protein Complement Fixation Test and, increasingly as the year progressed, by the Fluorescent Treponemal Antibody Test; for good measure a great many were also submitted to the Standard Wassermann Reaction. Any mention of the number of positive results would be quite invidious, as the number of the sera were repeat specimens from patients

undergoing antisyphilitic treatment, etc., but this much can be said : because this extensive range of tests was undertaken very few specimens required to be sent to Reference Laboratories for the Treponemal Immobilisation Test.

Similar tests, as well as the Colloidal Gold Test, were performed on 49 specimens of spinal fluid—nine fewer than in the previous year.

The Gonococcal Complement Fixation Test was asked for 129 times, 2 more requests than in 1965 and the number of positive results was exactly the same—4 only.

In contrast the number of swabs received for culture of *N. gonorrhoeae* continued to increase ; there were 8,524 of these, of which 1,367 were positive, compared with 1,111 positives out of 7,321 in 1965. The sensitivity of the strains isolated to a selection of at least five antibacterial drugs is routinely tested and, in the case of penicillin G (still the " sheet-anchor " of treatment for gonorrhoea in this Region) the minimum inhibitory concentration for each strain is precisely ascertained.

Trichomoniasis.—Equal attention was paid to the diagnosis of this infection, so often a concomitant of gonorrhoea, especially in the female, because, although the total number of examinations, at 4,961 was some 2,200 fewer than in the previous year, it nevertheless represented substantially more specimens. This was due to the fact that, in order to lighten the burden of work, it was decided to pool two swabs (one from the urethra and one from the cervix) from each female patient for the examination. A positive diagnosis was established by microscopic examination on 226 occasions (4.5 per cent. of the total) ; the remaining 4,735 specimens (or " pooled " pairs) were then cultured and *T. vaginalis* was isolated from 259 bringing up the overall positive rate to 9.8 per cent.

Ophthalmia neonatorum.—The nil record of the previous two years was broken by the isolation of *N. gonorrhoeae* on one occasion from a newborn baby's eye swab, but it must be stated that in a few other cases the smears looked suspicious on microscopic examination. One suspects that all too often, when a neonate is found to have so-called " sticky eyes ", antibiotic drops are instilled as a matter of routine and only when the discharge fails to clear up is the question of a bacteriological diagnosis considered ; unfortunately drops which have been found wanting therapeutically can still vitiate attempts to culture the

gonococcus, a delicate organism for all its pathogenic potential. This is a serious condition and it should be *absolutely mandatory* to send a carefully taken conjunctival swab to the laboratory before giving any treatment; and if there is likely to be the slightest delay before the swab can be delivered at the laboratory the swab should be placed in *transport medium*.

In all 99 of these swabs, 15 fewer than in 1965, were received during the year and, apart from the one from which a growth of gonococci was obtained, various pathogens, chiefly *Staph.aureus* and pneumococci, were isolated from a few others.

Tuberculosis.—Acid-fast bacilli were found in 7 out of 222 sputa examined microscopically and *Myco.tuberculosis* was isolated on culture from 7 out of 226; 5 patients accounted for these seven isolates, two being from repeat specimens. One specimen of sputum was inoculated into a guinea-pig, but the result was negative.

One hundred and seven miscellaneous specimens (urines, pleural fluid, gastric washings, etc.) were cultured for *Myco.tuberculosis*, all with negative results, 15 were inoculated into guinea-pigs and six of these (3 of urine and 3 of gastric washings) gave rise to tuberculosis lesions from which tubercle bacilli were subsequently cultured; 98 other specimens received only microscopic examination and acid/alcohol fast bacilli were found in one of them, a urine, but when this, and follow-up specimens from the same patient, were examined by cultural and biological methods with negative results it was concluded that the organisms seen originally had been saprophytic mycobacteria.

CLINICAL PATHOLOGY.

In this division of the Laboratory upwards of 76,000 examinations were conducted, an increase of about 8,000 on the figure for the previous year.

Urines.—The number of specimens received for quantitative bacterial cultures was 6,897, an increase of more than two thousand on the previous year's figure, and while most of them were submitted because the patients had symptoms indicative, or suggestive, of urinary tract infection, a substantial minority were accounted for by the scheme for "screening" apparently healthy pregnant women. A significant number of cases of unsuspected bacilluria in pregnancy were revealed in this way, and the fact that they received treatment which otherwise would have been denied them shows the value of the scheme.

Demands for diagnostic tests for pregnancy continued to increase and 5,972 specimens of urine (compared with 4,507 in the previous year) were received for this purpose.

Haematology.—Antenatal blood specimens received for ABO grouping and Rhesus typing totalled 10,062 (approximately one thousand fewer than in 1965) and of these 6,294 came from clinics and 3,768 from general practitioners; 1,091 of the former and 696 of the latter (17·7 per cent. of the total) were Rhesus-negative.

In the past the specimens found to be Rhesus—(*i.e.* D—) negative have all been referred for antibody tests to the Regional Blood Transfusion Centre. This was an unsatisfactory expediency which, while imposing an unjustifiable burden of routine work on a specialised department, took no account of the possibility of patients being sensitised to blood-group antigens other than those comprising the Rhesus system and, at long last, it became possible to embark on antibody testing in this Laboratory. The procedure now is that *all* blood samples received for grouping are submitted to a “screening” test against “cell-panels” representative of a wide selection of antigens. By this means all but a few of the exceptionally rare antibodies—and certainly the vast majority of those of clinical significance—can be detected. The “screen-positive” samples, whatever their blood-group, are then referred as before, for final assessment to the Regional Blood Transfusion Centre. Grateful thanks are due to Dr. John Wallace, Director of the Centre, for facilitating these arrangements by providing a regular supply of cell-panels, etc., and for all his assistance and support over the years.

The new procedure was initiated in June, and from then until the end of the year, 5,634 sera were screened in this way. Out of these, 195 “screen-positive” specimens required to be referred to the B.T.S. and the presence of significant antibodies was confirmed in 79 of them; to these must be added 42 of the Rhesus-negative specimens referred under the old arrangement in the first five months of the year, giving a total of 121 sera found to contain blood-group antibodies of one kind or another; the number of patients involved would of course be fewer, because some of them would be examined more than once during each pregnancy.

Blood specimens received for routine diagnostic haematology totalled 16,773, about 400 fewer than in the previous year, 8,595 of them from antenatal and other clinics and 8,178 from general practitioners

(compared with 7,842 of these in 1965). Although more than half the specimens required nothing more than haemoglobin estimations there remained no fewer than 3,243 which had to be examined more fully; amongst these the specimens from general practitioners outnumbered those from the clinics by about seven to one, reflecting the wider range of haematological abnormalities encountered in general practice.

Miscellaneous investigations.—The remaining 38,000 or so examinations in this section included the testing of strains of bacteria isolated from the various specimens for their sensitivity to antibiotics, investigations for proteinuria, occult faecal blood, etc. and the identification of helminths, which were found in 9 specimens—*Trichuris trichiura* (whipworm) in 4, *Enterobius* (or *Oxyuris*) *vermicularis* (threadworms) in 2, and *Ancylostoma duodenale* (hookworm), *Taenia saginata* (beef tapeworm) and *Ascaris lumbricoides* (roundworm) in one specimen each.

PUBLIC HEALTH—GENERAL CONTROL.

Milk Supply. Bacterial content.—The sources and grades of the 1,880 milk samples examined (73 more than in the previous year) are detailed in the following table:—

				Number of Samples	No. complying with standards	Percentage complying in 1966 in 1965	
<i>Hospitals Supplies—</i>							
Raw	{	Premium Milk	...	3	2	66.7	—
Milk		Standard Milk	...	38	30	78.9	—
Pasteurised Milk		...	...	270	250	92.6	91.9
<i>Public Supplies—</i>							
Raw	{	Premium Milk	...	191	122	63.9	—
Milk		Standard Milk	...	137	108	78.9	—
Pasteurised Milk		...	...	756	620	82	88.2
Raw Ordinary Milk		...	...	2	2	100	—
<i>School Supplies—</i>							
Pasteurised Milk		...	...	243	217	89.3	95.9
<i>Milk from Dispensing Machines—</i>							
Pasteurised Milk		...	...	182	81	44.5	46.4
Miscellaneous		...	...	51	—	—	—
Special Investigation		...	...	7	—	—	—

The Milk (Special Designations) (Scotland) Order 1965 came into full operation in January, 1966, and with it the new grades, Premium and Standard, replaced the former designations, Certified and Tuberculin Tested Milk. As the standards set for these new grades differ from

those which applied to their predecessors the percentage of samples complying with the standards in 1965 have in these cases been omitted from the table. It will, however be apparent that the percentage of samples which measured up to the required standards for Premium Milk was, to say the least, disappointing but perhaps judgment should be suspended until producers and retailers have had more time to get used to the Order.

The grade of milk previously known as T.T. (Pasteurised) Milk is now referred to simply as Pasteurised Milk and, as the standard remains exactly the same, comparison with the previous year is permissible and it will be seen that there was no significant difference between 1965 and 1966 in the percentage of samples which complied with the standard. In most categories the percentage was satisfactory but there was the perennial exception—milk from dispensing machines; the second table gives the detailed figures :—

Plate count per ml.	Number of samples complying with the Pasteurised standard*	Number of samples not complying with the Pasteurised standard*	Total
0 – 10,000 ...	50	4	54
10,000 – 50,000 ...	20	10	30
50,000 – 200,000 ...	12	23	35
200,000 – 1,000,000 ...	4	26	30
Over 1,000,000 ...	4	29	33
Total ...	<u>90</u>	<u>92</u>	<u>182</u>

* Absence of coliforms from 1/100ml.

Although better designed equipment is being increasingly adopted, no great improvement in the average quality of these samples can be expected while so many of the old whirlcool dispensers remain in use.

Additionally 839 milk samples (about the same number as in 1965) were examined for Argyll County Council.

Examination of Milk for Myco.tuberculosis.—The number of milk samples received for this specific purpose continued to decline; there were 83 of them during the year (compared with 145 and 109 in 1964 and 1965 respectively); they consisted of 32 samples of designated milk, 29 of school milk, 9 from hospital supplies and 13 from sources in Clydebanks. The results were all negative.

The justification for continuing these investigations is not at all clear, now that the risk of transmitting tuberculosis through milk is being guarded against by more certain means, such as the tuberculin-

testing of cattle. But, as the requests are still received it seemed only reasonable to look for means of deriving the maximum return from the investigations, and by arrangement with Professor Grist, specimens of serum collected at post-mortem from guinea-pigs inoculated with these milk samples are sent to the Regional Virus Laboratory, Ruchill Hospital, to be examined for Q-Fever antibodies. The results, which will in due course be presented elsewhere, are already providing interesting evidence about the incidence of *Coxiella burneti* infections among our dairy herds.

Examination of Milk for evidence of Br.abortus infection.—Investigations to follow-up cases of (human) brucellosis necessitated the examination of milk suspected of having conveyed the infection and 103 of these samples were received, two large dairy herds in Wigtownshire accounting for most of them. These were all submitted to the Brucella Ring Test and the Whey Agglutination Test and attempts were made to culture *Br.abortus* from all but one of them. The results were as follows :—

Ring Test		Whey Agg. Test* Reciprocals of Titres		Culture	
Positive	Negative	10 or over	less than 10	Positive	Negative
11	92	17	84	1	101

* The whey obtained from 2 of the samples proved unsatisfactory for the test.

The 8 samples which reacted most strongly in these tests were also inoculated into guinea pigs and 6 of them were considered to have contained viable brucellae, as judged by agglutinins to titres ranging from 1 in 80 to 1 in 2,560 found in the sera of the guinea-pigs six weeks after inoculation.

Examination of Milk Bottles, Dairy Equipment, etc.—Out of 131 washed milk bottles collected from distributors' premises which were examined during the year 108 (82.4 per cent.) complied with the standards. The classification (by Ministry of Agriculture standards) of 83 rinses from milk cans received for examination was : 78.3 per cent. satisfactory, 9.6 per cent. fairly satisfactory and 12 per cent. unsatisfactory. All these figures are very similar to those for 1965.

Additionally 83 swabs and rinses of various items of milk producers' (or retailers') equipment were examined and 11 milk bottles submitted on behalf of Argyll County Council.

Cream.—As the following table shows, the results obtained from tests of 254 samples of dairy cream did not differ significantly from the 1965 findings when 202 of these samples were examined :—

Bacterial count per gram	No. of Samples	Percentage 1966	Percentage 1965
0 – 50,000 ...	184	72.4	75.2
50,000 – 200,000 ...	17	6.7	6.9
200,000 – 1,000,000 ...	27	10.6	6.4
Over 1,000,000 ...	26	10.2	11.4
Coliform bacilli in 1/100 g.	60	23.6	27.7

Ice-cream.—The cautionary words about ice-cream which appeared in these pages last year seem to have gone unheeded because, as the table reveals, the results of the examination of 371 samples tell an even sorrier tale than did the figures for the 316 samples examined in 1965 :—

Bacterial count per gram	No. of Samples	Percentage 1966	Percentage 1965
0 – 50,000 ...	243	65.5	81.0
50,000 – 200,000 ...	64	17.3	9.8
200,000 – 1,000,000 ...	48	12.9	6.3
Over 1,000,000 ...	16	4.3	2.8
Coliform bacilli in 1/100 g.	99	26.7	21.5
Samples conforming to provisional standard of a plate count of no more than 50,000 per g. and coliform bacilli absent from 1/100 g. ...	209	57.6	70.3

Argyll County Council also submitted 5 samples.

Imitation Cream.—The 102 samples of this product yielded slightly better results than the 139 examined in the previous year but there is still room for improvement :—

Bacterial count per gram	No. of Samples	Percentage 1966	Percentage 1965
0 – 50,000 ...	77	75.5	72.7
50,000 – 200,000 ...	10	9.8	10.1
200,000 – 1,000,000 ...	8	7.8	7.2
Over 1,000,000	7	6.8	10.1
Coliform bacilli in 1/100 g.	17	16.6	18.7

Bottles other than Milk Bottles.—Of the 41 miscellaneous (beer, soft-drinks, etc.) bottles received 37 (90.2 per cent.) complied with the standards ; in 1965 every one of the 33 examined complied.

City Water Supply.—Water samples examined during 1966 totalled 1,183, an increase of 223 over the previous year, 1,023 of them being routine samples from various sources in the City's supply and distribution system; 126 were samples taken from mains before they were put into service (or after temporary interruption of service) or taken from various specific points in response to consumer's complaints, and the remaining 48, collected from dock standpipes, etc., were submitted by the Port Health Authority.

The following table gives the results for the chlorinated water samples.

Supply		No. of Samples	Average bacterial count per ml. at		Most Probable Number in 100ml.							
			37°C/24hrs.	22°C/72hrs.	Coliform bacilli				Typical ("faecal") <i>Esch.coli</i>			
					0	1	3	5	0	1	3	5
Loch Katrine	...	460	less than 1	76	437	20	1	2	447	11	0	2
Gorbals	...	231	35	206	212	9	4	6	220	4	2	5

These results are not quite as good as those recorded in recent years, but there may have been special reasons for this, *e.g.* climatic variations, temporary factors due to structural work involving the distribution system, etc., and the inclusion in the overall averages of results from even a few sub-standard samples tend to convey a distorted impression.

Swimming Baths.—Slightly fewer samples of pond water were received—403 as compared with 439 in 1965. The results of the examinations are tabulated below:—

Source		No. of Samples	No. with a Bacterial Count of 10 or more per ml. at 37°C/24 hrs	No. containing Coliform bacilli in 100 ml.	MPN in 100 ml.	
					Coliform bacilli	Typical ("faecal") <i>Esch. coli.</i>
Public Ponds	...	219	4	2 { 1 sample 1 sample	1 8	1 3
School	...	115	2	2 { 1 sample 1 sample	35 1	35 1
Private	...	69	—	—	—	—

It will be seen that, although four samples (and two in particular) were unsatisfactory, a good general standard has been maintained.

Foodstuffs : Fitness for consumption.—There was a slight increase, to 2,016, in the number of foods sampled for precautionary purposes (as distinct from the investigation of complaints, suspected causes of food poisoning, etc.). They were submitted by: the Port Health Inspectors (1,002 samples), the City Food Inspectors (173 samples) and the Corporation's Chief Veterinary Officer (841 meat samples). The latter comprised the largest single category and—excepting one

or two small batches of kangaroo meat—nearly all the samples were of imported boneless beef. This method of importing meat, which obviously makes for economy in the use of expensive refrigerated cargo-space, entails a recognised hazard, because the bulking of cuts of meat from different animals to make up the packages (each of about 50 lb.) must increase the opportunities for cross-contamination at the point of origin. Thus 16 of these 841 samples were found to be contaminated with salmonellas, 10 with *S.typhimurium*, 2 each with *S.muenchen*, 2 others each with *S.bredeney* and one each with *S.anatum* and *S.chester*.

The next most numerous categories of food imports were desiccated coconut and egg products, of which 514 (compared with 624 in 1965) and 425 (compared with 777 in 1965) samples respectively were received. It can be reported with satisfaction that, for the third year running, no salmonella was isolated from the coconut. The egg-products showed an improvement also, because only 5 of the samples—9 fewer than in the previous year—were found to be contaminated with salmonellae, the serotypes being *S.montevideo* (from 2 samples), *S.tennessee*, *S.thompson* and *S.braenderup*.

As for the remaining food samples, they included tinned meats of one kind or another (of which a great many were received) and a colourful variety of other articles of food, drink or confections, including bubble gum, pappadam cakes, yoghurt and those cocktail novelties known as "Pink Elephants", originally thought up by someone (who must have had a fiendishly sardonic sense of humour) in Hong Kong. These caused quite a stir early in the year because, in other areas and countries, some of them had been found to contain water contaminated with bowel pathogens, but the only batch examined in this Laboratory proved non-infective (although they contained an unsavoury number of non-pathogenic bacteria). Fortunately they found no market in Glasgow—possibly because of the dire warnings conveyed by Press reports—and it was not thought necessary to submit any more samples. Nor did anything else of note emerge from the examination of the other miscellaneous foodstuffs included in this section.

Other Investigations and Services for the Port Health Authority, etc. Apart from the reconstitution in injectable form of yellow fever vaccine, of which 3,125 doses (compared with 3,705) in 1965) were issued to the immunisation clinics, and sundry investigations, such as the examination for *Pasteurella pestis* (all with negative results) of 38 rats caught in ships or on the docks, the most important work carried out under this

heading was the examination of imported and other industrial materials for *B.anthraxis*. The number of these samples totalled nearly three times as many as those received in the previous year. The results were as follows :—

Bone, bone meal, bone grist, bone sinews, etc. or jute sacks for transporting these						*115 (26 positive),
Goatskin	...	...	...	...	...	43 (4 positive)
Sheepskin	...	...	...	...	...	3
Hides	...	...	...	...	...	7
Wool	...	...	...	...	...	3
Tail Hair	...	...	...	...	...	4
Dried Blood	...	...	...	...	...	3
Wheat grain (1), Hoof and Horn Meal (1)						2
Total						180 (30 positive)

*5 of these (10 of them positive) were submitted by the Medical Officer of Health for Greenock.

The list illustrates the continuing concern felt about imported bone.

Over and above the investigations described under these various headings, members of the Staff have busied themselves with other duties of an advisory or consultative character ; they have served on various outside committees and working-parties and they have devoted a great deal of their time to teaching. All this added interest to the work and, indirectly, enhanced the usefulness of the routine service provided at the Laboratory.

T. F. ELIAS-JONES,
Director.

PUBLICATIONS, REPORTS, ETC.

" An Attempt to Increase the Heat Resistance of *Microbacterium lacticum* "
G. D. Anagnostopoulos et al. (1966), J. Appl. Bact. 29, 207.

" First Interim Report of Working Party on the Laboratory Diagnosis of Venereal Diseases."

T. F. Elias-Jones et al. (1966), Report to the Sub-committee on Epidemiology of the Advisory Committee on Laboratory Services in Scotland.

" Infections acquired from Animals ; some reflections on the Bacterial Zoonoses"
T. F. Elias-Jones (1966), Scot. Med. J. 11, 282.

" Garden Fertilisers as a Source of Salmonellae."
Morag C. Timbury, William C. Forsyth* et al. (1966), Lancet, 2, 955.

* Mr. Forsyth, for many years a senior member of the Technical Staff, resigned in November to take up a similar position in Canada.

TOTAL OF EXAMINATIONS FOR YEAR 1966.

CITY OF GLASGOW.

INFECTIOUS DISEASES.

<i>Diphtheria and General Throat Infections—</i>							<i>Positive</i>	<i>Total</i>
Diphtheria ...	...	Suspects	...	...	...	...	0	505
Streptococcal Infections	...	Suspects and control	...	...	...	...	93	539
Vincent's Infections	...	Suspects and control	...	...	...	...	23	511
Pernasal swabs (Whooping Cough Survey)*...	...	...	...	...	...	...	10	183
Staphylococcal Infections	...	Suspects and control	...	...	...	...	92	140
<i>Gastro-intestinal Infections—</i>								
Enteric Fever (Typhoid, ...	...	Suspects	...	...	...	...	13	121
paratyphoid)	...	Control, etc.	...	...	...	...	60	288
		Water Works employees	...	...	...	...	0	209
Food Poisoning— (Salmonellosis)	...	Suspects and control	...	...	...	...	174	12,960
		Foodstuffs	...	...	...	...	0	79
		Miscellaneous swabs	...	...	...	...	0	8
(Staphylococcal)	...	Suspects and control	...	...	...	...	6	53
		Foodstuffs	...	...	...	...	20	70
(Clostridial)	...	Suspects and control	...	...	...	...	1	50
		Foodstuffs	...	...	...	...	2	55
<i>Dysentery—</i>								
Bacillary ...	...	Suspects	...	...	...	...	1,104	8,054
		Control	...	...	...	...	713	6,842
		Colicine-typing of <i>Sh.sonnei</i>	...	...	...	...	—	1,085
Amoebic ...	...	...	...	...	...	...	0	82
Other forms—Giardia, etc.	...	...	...	...	...	...	2	2
Specific <i>Esch.coli</i>	...	...	...	...	...	...	—	1,696
<i>Tuberculosis—</i>								
		Sputa	...	...	...	...	7	222
		Other specimens (microsc. exam.)	...	...	...	...	0	98
		Various specimens (biological exam.)	...	...	...	...	6	16
		Various specimens (culture)	...	...	...	...	7	333
<i>Venereal Diseases—</i>								
		Serological Tests for Syphilis (W.R., etc.)	...	...	...	...	0	41,119
		Lange's Colloidal Gold Test	...	...	...	...	—	49
		Gonococcal Complement Fixation Test	...	...	...	...	4	129
		Smears and cultures of Urethral for <i>N.gonorrhoeae</i>	...	...	...	...	1,367	8,524
		Ophthalmia Neonatorum (smears and cultures)	...	...	...	...	1	99
<i>Carry forward</i>							...	84,121

* This Survey, which is still in progress, will be more fully described in next year's Report.

	Brought forward	...	Positive	Total
OTHER EXAMINATIONS—			—	84,121
Blood—Rh factor			—	10,062
Blood—ABO grouping			—	10,062
Blood—group antibody tests			—	5,634
Blood—General Haematology, cell counts, haemoglobin, etc.			—	16,773
Blood—cultures, Paul-Bunnell tests, etc.			—	62
Urines, etc.			—	12,073
Exudates—various			—	173
Faeces for worms			—	10
Faeces for occult blood			—	26
Swabs for Trichomoniasis			485	4,961
Pregnancy tests			—	5,972
Antibiotic Sensitivity tests			—	15,875
Miscellaneous			—	21
GENERAL PUBLIC HEALTH—				
City Milk Supplies (plate count and coliforms)			—	1,569
Hospital Milk Supplies (plate count and coliforms)			—	311
Milk (biological tests)			0	83
Miscellaneous swabs and rinses			—	81
Milk bottles (bacterial count)			—	131
Swabs from Milk cans			—	83
Ice-cream			—	371
Foodstuffs—fitness for consumption :—				
Imitation cream, cream, etc.			—	355
Miscellaneous foods, dried egg, etc.			—	173
Beer and Mineral Water bottles			—	41
Water Supplies—routine			—	1,135
Water from swimming ponds			—	403
Meat from Chief Veterinary Officer			—	841
Animal feeding stuffs			—	16
PORT HEALTH AUTHORITY—				
Anthrax (hides, skins, hair, bone, etc.)			20	130
Plague (examination of rats)			0	38
Foodstuffs—fitness for consumption			—	1,002
Water Samples			—	48
OUTSIDE AUTHORITIES—				
<i>Stirlingshire</i> —				
Gastro-intestinal infections		462		
Other infections		11		
Antibiotic Sensitivity tests		39		
				512
<i>Clydebank</i> —				
Milk (biological tests for tuberculosis)			0	13
<i>Argyll</i> —				
Milk (plate count and coliforms)		839		
Ice-cream		5		
Milk Bottles		11		
Bottle top		1		
				856
<i>Wigtownshire</i> —				
Milk samples for <i>Br.abortus</i>		111		
Milk samples for <i>Salmonellae</i>		35		
				146
<i>Greenock</i> —				
Anthrax (bone meal, sacks, etc.)			10	50
				174,213

SECTION XIV

FOOD.

SUMMARY OF OPERATIONS UNDER THE FOOD AND DRUGS (SCOTLAND) ACT, 1956, THE MILK AND DAIRIES ACTS AND ALLIED ACTS, ORDERS AND REGULATIONS FOR THE YEAR ENDING 31st DECEMBER, 1966.

This year is the tenth anniversary of the passing of the present Food and Drugs Act and during these years some 75 pieces of legislation appertaining to food reached the statute book and with them their attendant changes, new orders and amendments.

It is gratifying to note that despite this new legislation the percentage of samples failing to comply did not rise as might have been expected but remained at just over 2.5 per cent. Food manufacturers have to be commended for not falling foul of the labyrinth of legislation.

Complaints on the other hand leapt from 141 in 1956 to 485 in 1965. This year there has been a slight drop (to 376).

Court cases also increased. In 1956, 33 cases were heard in Court and fines totalling £135 were imposed, while this year there were 46 cases and £255 in fines.

New Legislation issued during the Year—

The Butter (Scotland) Regulations, 1966, specify the compositional requirements regulating the amount of milk fat, milk solids and moisture, including salted and unsalted butter and requirements for the labelling and advertisement of butter.

The Cheese (Scotland) Regulations, 1966, lay down compositional and descriptive requirements of cheese, including hard, soft, cream, whey, processed cheese, and cheese spread and compounds thereof.

The Colouring Matter in Food (Scotland) Regulations, 1966, prescribe a list of 25 permitted colouring matters, having deleted six from and added one to the list contained in 1957 Regulations.

The Food Hygiene (Scotland) Amendment Regulations, 1966, applies the principal regulations to vehicles and stalls, including their lighting and ventilation.

The Milk (Special Designations) (Scotland) Amendment Order, 1966, prescribes a new special designation "Ultra Heat Treated" and tests therefor.

The Mineral Hydrocarbons in Food (Scotland) Regulations, 1966, supersede the Regulations of 1964.

The Skimmed Milk with Non-Milk Fat (Scotland) Amendment Regulations, 1966, prescribe standards and labelling requirements.

The Salad Cream (Scotland) Regulations, 1966, specify compositional requirements of the amount of vegetable oil and egg yolk solids contained in salad cream.

Observations were made on reports and memoranda issued by the Scottish Home and Health Department, Food Standards Committee, Counties of Cities Association, Sea and Air Port Authority and Board of Trade :—

Pesticides in Agriculture and Food Storage (Oral and written evidence was submitted).

Artificial Sweeteners in Food.

Salad Cream (Scotland) Regulations, 1966.

Proposed Amendment of the Milk (Special Designations) Act, 1949.

Labelling of Food Bill (Two Reports).

Milk Hygiene Quality Scheme.

Code of Practice for Marzipan, Almond Paste and Almond Icing.

Proposals for New Shellfish Regulations.

Chestnuts (Aflatoxin).

The Butter (Scotland) Regulations, 1966.

Examination of " Globus " Ox Tongue, Estab. No. 6.

Proposals to amend the Meat (Staining and Sterilisation) Regulations, 1960.

Proposals for Regulations on Fish and Meat Spreadable Products.

Colouring Matter in Kenya and Chilli Powder.

Food Standards Committee's Report on Claims and Misleading Descriptions.

The Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

Dairy Effluents.

Davies Report on Milk Distribution.

Working Party on the Collection of Residue Data.

Public Health (Aircraft) Regulations, 1966.

Public Health (Ships) Regulations, 1966.

The Food and Drugs (Scotland) Act, 1956.—A total of 4,485 samples was obtained and examined, 1,349 being formal samples and 3,536 informal : 33 (2.44 per cent.) of the former and 101 (2.88 per cent.) of the latter were reported to be non-genuine. The corresponding figures last year were 29 (2.05 per cent.) and 73 (1.90 per cent.) respectively.

Of the 33 formal samples returned non-genuine court proceedings were taken in 22 cases and a conviction was obtained in each case, all against butchers in whose products an excess amount of preservative

was found. Letters of warning were sent to the other traders, one dairyman, nine butchers and one shredded suet manufacturer, whose products were not exactly in conformity with the legal standards.

ABSTRACT OF TOTAL SAMPLES EXAMINED DURING 1966

Article	Informal.		Statutory.		Percentage adulterated.		Percentage of Samples taken in each Group to Total.	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine	Informal %	Statutory %	Informal %	Statutory %
Milk	1,919	37	842	1	1.93	0.12	54.27	62.49
Milk Products (Butter, Cheese, etc.)	103	11	40	—	1.67	—	2.91	2.92
Meats and Meat Products and Fish Products	259	27	177	32	14.24	18.08	7.32	13.11
Cereals	74	1	32	—	1.35	—	2.09	2.43
Tea	12	—	34	—	—	—	0.34	2.51
Spirituous Liquors	5	—	26	—	—	—	0.14	1.91
Drugs	62	1	13	—	—	—	1.76	0.95
Flavourings and Condiments	162	6	40	—	3.71	—	4.58	2.95
Ice-Cream	255	11	4	—	4.31	—	7.21	0.29
Colourings	2	—	—	—	—	—	0.06	—
Miscellaneous	683	8	141	—	1.71	—	19.32	10.46
	3,536	101	1,349	33	3.88	2.44	100.00	100.00

ABSTRACT OF INFORMAL AND STATUTORY SAMPLES OF SWEET MILK EXAMINED DURING YEAR 1966.

Informal.					Statutory.			
No. Exam- ined	No. Non- Genuine.	Average Per- centage Composition.		1966 Month.	No. Exam- ined.	No. Non- Genuine.	Average Per- centage Composition	
		Fat.	Non- Fat.				Fat.	Non- Fat
169	1	3.76	8.86	January	75	—	3.81	8.90
183	6	3.69	8.88	February	83	1	3.63	8.85
207	4	3.63	8.86	March	89	—	3.60	8.87
146	2	3.67	8.95	April	67	—	3.61	8.87
171	2	3.64	8.96	May	83	—	3.90	8.86
151	6	3.70	8.95	June	78	—	3.54	8.92
102	3	3.67	8.78	July	75	—	3.57	8.65
171	7	3.84	8.90	August	40	—	3.66	8.84
179	1	3.90	8.85	September	61	—	3.79	8.87
150	—	4.10	8.96	October	59	—	3.90	8.93
180	4	3.90	8.59	November	61	—	3.86	8.92
110	1	3.96	9.03	December	71	—	3.97	8.91
1,919	37	3.79	8.88		842	1	3.71	8.88

1966 Percentage Adulterated : Informal—1.92 ; Statutory—0.12

1965 Percentage Adulterated : Informal—1.29 ; Statutory—0.22

1964 Percentage Adulterated : Informal—0.84 ; Statutory—0.23

THE PRESERVATIVES IN FOOD (SCOTLAND) REGULATIONS, 1962.

Sulphur dioxide (SO₂) was the only preservative found to be used in excess of the specified limits. Benzoic Acid when used was within permitted amounts. No other permitted or prohibited preservative was detected in the samples of food examined.

Twenty-two convictions were obtained for excess amounts of added preservative found in mince and sausages. Fines totalling £120 were imposed. In addition nine letters of warning were sent to butchers whose samples contained minor excess of preservative.

ABSTRACT OF ARTICLES OF FOOD IN WHICH PRESERVATIVES, ETC.,
WERE FOUND AND THE NATURE AND AMOUNT
DURING THE YEAR ENDING 31ST DECEMBER, 1966.

Nature of Article.	Number examined.	Number in which Preservatives, etc., were found.	Nature of Preservative, etc.	Parts per Million.	
				Highest.	Lowest.
Cornflour ...	20	7	Sulphur Dioxide	13	77
Custard Powder ...	17	9	" "	8	32
Fish Dressing ...	10	1	" "		100
Fruit Cordial ...	3	3	" "	121	224
Fruit Curd ...	12	4	" "	13	38
Fruit Dried ...	41	5	" "	13	653
Fruit Glace ...	2	1	" "		64
Milk Shake Syrup ...	1	1	" "		237
Mince ...	83	44	" "	25	1,229
Potato (Instant) ...	5	5	" "	32	250
Preserves (Jam) ...	75	8	" "	13	38
Ribena ...	1	1	" "		219
Rice (Ground) ...	13	1	" "		32
Sausages ...	271	262	" "	51	224
Semolina ...	14	1	" "		51
Shandy ...	5	2	Benzoic Acid	73	188
Snipping (Liquid Ice Lolly) ...	3	3	" "	453	545
Soft Drinks ...	32	32	" "	52	156
Sugar (Demerara) ...	6	2	Sulphur Dioxide	13	43
Table Jellies and Crystals ...	6	6	" "	19	51
Vegetables Mixed (Dried) ...	5	5	" "	128	717

THE FOOD AND DRUGS (SCOTLAND) ACT, 1956.

TABLE SHOWING NATURE AND NUMBER OF TOTAL SAMPLES
PROCURED AND EXAMINED DURING 1966.

Article	Informal		Formal	
	No. Taken	No. Non- Genuine	No. Taken	No. Non- Genuine
Baking Powder, Golden Raising Powder	2	—	2	—
Bread	—	—	—	—
Butter	20	1	7	—
Cheese (including spreads and processed cheese)	14	1	16	—
Coffee (including essence and mixtures)	11	—	2	—
Cream (including single, double and sterilised)	56	8	—	—
Dried and Preserved Fruit ...	10	—	37	—
Fish Cakes	1	—	—	—
Fish Pastes and Spreads ...	13	—	—	—
Flour and Self-raising	9	—	5	—
Flour Mixtures (cake, pudding, sponge mixtures and cake flour)	65	1	27	—
Fruit Conserves (e.g., tinned and bottled fruit)	—	—	—	—
Gelatine	1	—	—	—
Ice-Cream	255	11	4	—
Ice Lollies	4	3	—	—
Jams, Jellies and Fruit Curds ...	69	1	—	—
Margarine	12	—	17	—
Meat Pies, Pastries and Sausage Rolls	—	—	—	—
Meat Pastes and Spread (chopped and potted)	55	—	—	—
Milk (excluding dried, condensed, evaporated and flavoured, etc., milk)	1,933	37	842	1
Milk (condensed and dried) ...	28	1	—	—
Mince	46	12	37	11
Saccharin	5	—	—	—
Salad Cream and Mayonnaise ...	4	—	—	—
Sausage and Sausage Meat ...	136	14	135	20
Soft Drinks (excluding fruit juices)	44	1	—	—
Spices and Condiments	152	6	40	—
Spirits	—	—	26	—
Suet	7	1	2	1
Sugar and Confectionery ...	13	—	13	—
Synthetic Cream	—	—	—	—
Table Jellies	51	—	3	—
Tomato Ketchup and Sauces ...	8	—	—	—
Other Articles (including all articles not named above) ...	512	3	134	—
	<u>3,536</u>	<u>101</u>	<u>1,349</u>	<u>33</u>

THE FOOD AND DRUGS (SCOTLAND) ACT, 1965.

INSPECTION OF FOOD AND FOOD PREMISES.

The number of visits paid to food premises was 9,494 during which 2,115 lots of food were examined amounting to 118 tons 13 cwts. 32 lbs., 62 tons 4 cwts. 35½ lbs. more than last year. This is a heavy responsibility on inspectors who are often called upon to condemn foodstuffs to suit the wishes or convenience of the agents or store-keepers. The food may be slightly out of condition, although not unfit for human consumption or it may have been quite a long time in store. Incidentally there is still a quantity of the suspect corned beef still held in store following upon the Aberdeen typhoid outbreak although a large quantity has already been shipped back to South America. As in previous years a large number of Condemnation Certificates was issued for food considered unfit for human consumption and voluntarily surrendered by the owners.

FOOD AND DRUGS (SCOTLAND) ACT, 1956, SECTION 9.

SUSPECTED FOOD.

Complaints continue to pour in. The number this year totalled 375, a slight fall from last year's total of 485. A number of complainers expect the Department to support their efforts to obtain compensation. The duty of a food and drugs authority is to find the cause and have it remedied. Prosecution is considered a last resort. There were three such cases in which court action was warranted, namely, a needle found in cheese, a fairly large piece of metal found in a morning roll, and puff pastry found to contain rodent excreta. Fortunately there was no injury in the former two cases and in the latter the discovery was made before any of the pastry was consumed.

Complaints are always interesting and usually varied. Those of note included alleged colouring in lentils and a cockroach in a can of luncheon meat from the Continent, both of which proved negative. Creamed semolina in large cans gave rise to repeated complaints of sourness. Exhaustive tests were carried out by the manufacturers and by experts. The cause was never found but the firm concerned discontinued the size of pack which had given rise to these complaints. Suspected glass in canned salmon, a regular offender, proved to be magnesium ammonium phosphate which is harmless.

By far the greatest number of complaints were made of mould, despite the high number of advice sheets on the proper handling of meat products such as pies, sausages, etc.

Pink Elephants, a New Year novelty, in which a plastic container in the shape and colour of pink elephants is filled with water in the country of origin were again examined this year. Last year a Medical Officer of Health in England found the water to be seriously contaminated. All of the samples examined by this Department were found to be free from pathogenic bacteria.

THE MILK AND DAIRIES (SCOTLAND) ACT, 1914,
THE MILK (SPECIAL DESIGNATIONS) ACT, 1949, AND
THE MILK (SPECIAL DESIGNATIONS) (SCOTLAND) ORDER, 1965.

As mentioned last year the names of grades of milk changed from "Certified" to "Premium" and "Tuberculin Tested" to "Standard" and the tests were more stringent in all grades. The results of samples obtained, however, were favourable. The percentage of failures in tests of the top grade fell this year from 42·48 to 36·64, while the failures in the second top grade, also a raw milk, rose from 14·76 per cent. to 21·16 per cent., while Pasteurised milk showed phosphatase test of only 1·06 per cent.

The number of formal and informal samples totalled 2,761. The average fat and solids-not-fat both rose slightly from 3·68 to 3·75 per cent. and 8·81 to 8·88 per cent. respectively. Designated milks sampled during the year numbered 1,084, a number of these, of necessity, being repeat samples.

There were 6,123 visits of inspection made to dairies and 251 visits were made to the 31 byres of the 23 milk producers. These byres provide accommodation for 969 cows although the average number kept over the year was 733.

Five producers have installed bulk milk tanks.

More and more milk is being sold in cartons, both in Tetra-Pak form and in the ordinary block type.

There are now 1,751 registered dairies, compared with 1,792 last year, a reduction of 41. This number consists of 18 producers, 14 wholesalers (pasteurising establishments), 1,702 retailers and 17 vehicles from outwith the City. During the year there were 270 changes of registration.

Several complaints of dirty milk bottles were received and these included a slug alleged to have been found in a bottle of pasteurised milk. This is quite impossible because of the comparatively high temperature at which bottles are washed and because of the filtering of the milk after preheating in the pasteurising process; another was of an insect said to be in a bottle of milk. This case proved to a flaw in the glass of the bottle.

Sterilised Milk.—The daily sales of Sterilised milk are very small, seven gallons. No milk is sterilised in the City creameries. Twelve samples were obtained and found to conform to the prescribed tests. The average fat and solids-not-fat contents were 3·67 per cent. and 8·66 per cent. respectively, slightly lower than last year.

Jersey Milk.—Jersey milk was supplied by six farmers to our creameries. The quality standard tended to fall again this year when 61 samples were examined, the average being 4·61 per cent. fat and 9·33 per cent. solids-not-fat. Seven samples were below 4 per cent., the legal standard; two samples failed the coliform test; eight the colony count; and five both in coliform and count.

	1966	1965	1964
<i>" Premium "—</i>			
Producers	1	1	1
Dealers	568	1,324	1,460
Total Average Daily Sales (gallons) ...	807	1,131	1,840

<i>" Standard "—</i>			
Producers	16	20	21
Dealers	108	1,676	1,812
Total Average Daily Sales (gallons) ...	454	504	352

<i>" Pasteurised "—</i>			
Pasteurising Establishments	14	14	15
Dealers	1,744	1,784	1,806
Total Average Daily Sales (gallons) ...	89,647	89,565	88,768

1966—Figures not provided.

1965—Includes 810 gallons Homogenised.

1964—Includes 1,030 gallons Homogenised.

<i>" Sterilised "—</i>			
Dealers	35	71	71

RESULTS OF EXAMINATIONS OF DESIGNATED MILK (1).

	PREMIUM	STANDARD
	(a) Not more than 15,000 Bacteria per ml.	(a) Not more than 50,000 Bacteria per ml.
	(b) No Coliform Bacillus in 1/10 ml.	(b) No Coliform Bacillus in 1/1,000 ml.
<i>Bacteriological Examination—</i>		
Number examined	191	137
Number conforming to all requirements	121	108
Number exceeding count only	34	21
Number exceeding count and having coliforms present	25	1
Number conforming to count but having coliforms present	11	7
Agar Count per m. { Highest	100,000	100,000
{ Lowest	600	1,000
Presence of Coliforms (—)	155	129
(+)	36	8

Chemical Examination—

Fat Minimum 3%—		
Number 3% or over ...	173	136
Number below 3% ...	18	1
Average butter-fat content	4.11	4.09

48 Examined Biologically with negative result.

RESULTS OF EXAMINATIONS OF DESIGNATED MILKS (2).

	PASTEURISED
	(a) No Coliform Bacillus in 1/100 ml.
	(b) Not more than 10% of P. nitrophenol/ml. of milk (Phosphatase Test)
Number examined	756
Number passing each test	621
Number failing in one or more of the tests ...	135
<i>Milk-Fat Test—</i>	
Number Satisfactory	752
Number Unsatisfactory	4
Average Butter-Fat Content	3.71

78.40 per cent. of the samples examined were in conformity with the terms of the Orders compared with 82.23 last year.

Chemical examination showed 23 samples to be deficient in fat.

MILK SUPPLIED TO THE HOSPITALS OF THE
WESTERN REGIONAL HOSPITAL BOARD.

This service to the Board was continued. The results are shown below :—

			Examined	Failed
" Premium "	...	...	3	1
" Standard "	...	...	38	10
" Pasteurised "	...	...	272	20
			<u>313</u>	<u>31</u>

Last year 37 samples failed out of a total of 323 samples.

Milk for School Children.—" Pasteurised " milk was again supplied to the City schools this year by seven contractors. Two hundred and forty-three samples were examined in terms of the Milk (Special Designations) Orders during the year when 26 failed the coliform test compared with 6 failures for the same cause last year of the 149 samples examined. Sixty-six samples were subjected to the biological test and all gave negative results.

The following table is a summary of the results of the sampling :—

SCHOOL MILK (" PASTEURISED ").

No. Exam- ined	No. Passing both Phosphatase and Coliform Tests	No. Failing Phosphatase Test only	No. Failing Coliform Tests only	No. Failing Both Tests	No. Tuber- culous	Average Fat Solids	Average Non-Fat Solids
243	217	3	26	1	—	3.70	8.83

The total consumption this year amounted to 1,412,330 gallons compared with 1,440,168 last year, a decrease of 27,838 gallons. The quality of this milk compares favourably with that of past years.

Milk Dispensing Machines.—The results of samples obtained from these machines are still far from satisfactory. A bacterial standard is still awaited.

Year		Number Examined	Number Failed
1964	... ..	228	104 or 46.02 per cent.
1965	... ..	207	111 or 53.62 per cent.
1966	... ..	182	99 or 54.34 per cent.

One hundred and eighty-two samples were procured, of which 99 or 54.34 per cent. failed the coliform test prescribed in the 1965 Order, i.e., coliforms absent from 1/100 ml. Coliforms were present in 126 or 69.18 per cent. of the samples when examined in 1/10 dilution and 87 or 47.80 per cent. when examined in 1/1,000 dilution.

Colony counts showed equally bad results ; 122 samples or 67.04 per cent. had counts of under 200,000 per ml. ; 60 or 32.96 per cent. had counts of over 200,000 while 32 or 17.58 per cent. had counts of over 1,000,000. In 68 samples or 37.36 per cent. coliforms were absent and had a count of less than 200,000 colonies per m. ; 57 or 31.32 per cent. coliforms were present with counts of less than 200,000 ; 57 or 31.32 per cent. coliforms were present with counts of more than 200,000.

Dairy Cream—Food Standards (Cream) Order, 1951.—The number of dairy cream samples taken this year was again increased. Two hundred and fifty-four samples were examined bacteriologically and 89 of these were considered unsatisfactory because of high count (over 50,000 per g.) and/or the presence of coliform organisms. In addition 19 were examined in terms of the Order ; 8 failed to conform.

The 89 or 35 per cent. of the samples which failed were procured for the most part from retail premises and indicated lack of proper handling and/or rotation or overstocking, although there were no complaints of cream being sour. The bacteriological results of all samples were reported to dairymen concerned.

A new type of cream reached the market, cream which is heat treated at temperatures above those for sterilising milk and consequently it was considered that the fat standard should be the same fat standard as canned cream, namely, 23 per cent., although marked 18 per cent. The question was raised with the processor in England but no decision was reached. Action is awaited at Government level.

Canned, Condensed and Evaporated Milk.—Nineteen samples of a variety of condensed milk, sweetened and unsweetened, were obtained and all conformed to the legal standard. One sample was drawn from a bag of dried milk described as skimmed milk powder and was shown to be full cream dried milk.

Cleansing of Milk Bottles.—The number of washed bottles uplifted at the creameries and examined bacteriologically was 130.

The results of bottles washed by the different methods are as follows :—

	No. of Bottles	Satis- factory	Unsatis- factory	Percentage Satisfactory
Washed by Soaker Sprayer Machine	44	39	5	86·36
Washed by Jet Type Machine ...	82	66	16	80·48
Washed by Rotary Brushes ...	—	—	—	—
Washed by Hand	—	—	—	—

Cleansing of Milk Cans.—The improvement achieved last year was maintained.

	Number Examined	Number Satis- factory	Number Fairly Satis- factory	Number Unsatis- factory
1963	102	76	13	13
1964	84	73	4	7
1965	80	63	9	8
1966	83	65	10	8

The table shows that 65 or 78·31 per cent. were satisfactorily washed compared with 63 or 78·75 per cent. last year ; 10 or 12·05 per cent. fairly satisfactory compared with 9 or 11·25 per cent. last year ; while the percentage of those unsatisfactory was 8 or 9·64 compared with 8 or 10·0 last year.

Ice-Cream.

The Ice-Cream (Scotland) Regulations, 1948, and

The Ice-Cream (Scotland) (Amendment) Regulations, 1948 to 1961.

The number of registered ice-cream dealers in the City again showed a reduction. The number now stands at 368, 22 fewer than last year, while 390 Certificates of Registration are held in respect of vehicles, 13 fewer than last year. The “through-put” of persons temporarily engaged in vehicles vending ice-cream still remains high. Certificates of Authorisation issued and recorded during the year numbered 332, being three fewer than last year. The hygienic aspect of ice-cream premises and vehicles is under the requirements of the Food Hygiene Regulations and therefore the 1,983 inspections made of premises and vehicles were principally of a hygienic nature.

During the summer months, June to September, inspections were again made of ice-cream vehicles on Sunday afternoons. A slight improvement was noted. Infringements, for the most part of a technical nature, of the Regulations were observed and notified by letter to the person and/or persons responsible. Fifteen were unable to produce a Certificate of Authorisation on demand.

One ice-cream vehicle was found to be in a very dirty condition and the vendor was found to have dirty hands and dirty fingernails. The circumstances were reported to the Procurator-Fiscal. The cases were heard in court where fines of £20 and £10 respectively were imposed on the owner of the vehicle and the vendor.

One ice-cream dealer was charged with storing ice-cream in un-registered premises and selling ice-cream from an unregistered vehicle. He failed to appear in court having vacated his premises and left the district. The case was deserted pro loco ex tempore.

A second ice-cream dealer was charged with storing and selling ice-cream from an unregistered ice-cream vehicle. He too failed to appear when called. A warrant was issued for his arrest.

*The Food Standards (Ice-Cream) (Scotland) Regulations, 1959, and
The Labelling of Food (Amendment) (Scotland) Regulations, 1959.*

		No. under 50,000 with Coliforms Absent	No. under 50,000 with Coliforms Present	No. over 50,000 with Coliforms Absent	No. over 50,000 with Coliforms Present
Year	Year Examined				
1965	316	222	33	26	35
1966	367	209	33	57	68

The table shows 209 satisfactory samples or 57·22 per cent. compared with 222 or 70·25 per cent. last year. This year 68 (15·83 per cent.) of the samples failed both in count and coliform compared with 35 of 316 or 11·08 per cent. last year. Of the 372 informal samples taken, 253 were subjected to both chemical and bacteriological examinations, while 118 samples were for bacteriological examination only and one for chemical examination only. Of the 253 samples, 11 (4·33 per cent.) failed to comply with the legal standard compared with 13 (5·79 per cent.) of the 259 samples taken last year. Only three samples failed in both fat and milk-solids-not-fat.

Samples which failed the legal standard were followed up and repeat samples taken. Repeat samples were also taken of most of those failing the recommended bacteriological standard.

Four samples, in addition to the 253 samples taken informally, were dealt with in terms of the Food and Drugs Act. All complied with the statutory standard.

	No. Exam- ined	No. Adul- terated	No. Deficient in Fat	No. Deficient in Milk Solids Not Fat	No. Defi- cient in Fat and Milk Solids Not Fat
1965	259	13	8	4	1
1966	255	11	6	2	3

AVERAGES

		Milk Ices		Dairy Ice Cream and Ice Cream	
		Fat	Milk Solids Not Fat	Fat	Milk Solids Not Fat
1965	...	3.39%	7.60%	7.41%	9.90%
1966	...	4.50%	8.00%	7.94%	13.29%

HIGHEST

1965	...	4.16%	9.40%	12.46%	14.80%
1966	...	5.21%	8.50%	12.43%	17.60%

*The Labelling of Food Orders, 1953-1961, and
The Food and Drugs (Scotland) Act, 1956, Section 6.*

The provisions of the Orders and Act were on the whole complied with. There were, however, four cases which did not.

1. A sample of castor oil was found to contain an excess of acid. The manufacturers were advised and the stock was withdrawn.
2. A sample of mince meat was found to contain an excess of acetic acid. It appeared to be an isolated incident.
3. The label affixed to a bottle of malt vinegar did not bear the name and address of the manufacturer. This was a printer's omission and the labels were reprinted rectifying the omission.
4. Three samples of snipping (a liquid for making ice lollies) were found to declare the ingredients in the incorrect order. This too was rectified after directing the attention of the manufacturers to the error.

Public Health (Meat) Regulations (Scotland), 1932, Section 15.

Eight certificates of approval, two fewer than last year, were granted in respect of meat storage premises and 83 copies of these certificates, 13 more than last year, were issued for vehicles operating from these premises.

Imitation Cream.

Food and Drugs (Scotland) Act, 1956, Section 16.

Due to the pressure of other duties the attention paid to the sampling of imitation cream was maintained but not as much time was devoted to this as was desired.

The number of samples taken was 101 compared with 140 last year. Seventy-six or 75.25 per cent. were satisfactory compared with 95 or 67.86 per cent. last year; 25 or 24.75 per cent. compared with 45 or 32.14 per cent. unsatisfactory. Nine or 8.91 per cent. of these

samples failed because of high counts with coliforms present; 16 or 15.82 per cent. failed in count only and 7 or 6.93 per cent. failed in coli only, while of the 101 samples, 25 had a count of over 50,000 and 10 of 100 or less.

Intimations of unsatisfactory results were sent to bakers from whom such samples were obtained.

Eggs—Egg Products, including Imported.

The Liquid Egg (Pasteurised) (Scotland) Regulations, 1963.

Pasteurised Liquid Whole Hen Egg (Packed in Glasgow).—The two City breaking-out plants continue to operate satisfactorily although by no means full-time, and are well maintained. All of the 17 samples were reported "no Salmonella isolated." The eggs broken out were chiefly home eggs, but there was one lot of South African and one lot from Northern Ireland.

Dried Hen Egg Albumen (U.S.A.).—There were three consignments of dried hen egg albumen (U.S.A.) from which 30 samples were drawn. All samples were reported "free from Salmonella." The total weight of these consignments was 1 ton 7 cwt. 111 lbs.

Export Certificates.—Certificates to accompany the export of meat and meat products were issued in respect of five lots of black puddings, two lots of white puddings and two lots of haggis being shipped to the Far East.

The Colouring Matter in Food (Scotland) Regulations, 1957.—The following table indicates the kinds of colour and the number of instances the colour was found :—

Colour	Occasions on which colour was found			Occasions on which colour was found	
	1965	1966		1965	1966
Ponceau MX ...	5	—	Tartrazine ...	109	65
Ponceau 4R ...	10	2	Naphthol Yellow S ...	—	—
Carmoisine ...	13	12	Yellow 2G ...	3	6
Amaranth ...	33	19	Yellow RFS ...	—	—
Red 10B ...	4	3	Yellow RY ...	1	—
Erythrosine ...	4	6	Sunset Yellow FCF ...	31	21
Red 2G ...	13	5	Oil Yellow NP ...	—	—
Red 6B ...	4	—	Green S ...	4	2
Red FB ...	—	—	Blue VRS ...	13	3
Ponceau SX ...	5	—	Indigo Carmine ...	—	—
Ponceau 3R ...	—	—	Violet BNP ...	—	—
Fast Red ...	4	1	Brown FK ...	1	—
Orange G ...	5	1	Chocolate Brown FB ...	4	2
Orange RN ...	12	7	Chocolate Brown HT ...	1	1
Oil Yellow GC ...	—	—	Black PN ...	—	—

Colouring matter is prohibited in mince but only two samples of mince were found to contain Carmoisine. The first sample was an informal sample, a formal sample followed. The butcher was convicted and fined £5.

Chilli powder of American origin was found to contain Oil Red XO, a prohibited colouring matter. The existing stock was destroyed.

Desiccated Coconut.—During the year 19 samples were examined for the presence of Salmonella. All samples were again declared free.

The Mineral Hydrocarbons in Food (Scotland) Regulations, 1964.—This is the twelfth consecutive year in which all the samples examined were in conformity with the provisions of the Order.

Artificial Sweeteners in Food Order, 1947.—No prohibited artificial sweetners were found again this year. Saccharin, however, was in ten of the large number of samples of foodstuffs examined but within the specified limits.

Cyclamic acid was found in 35 samples of soft drinks to be consumed by diabetics. These were in conformity with the Soft Drinks Order.

Merchandise Marks Acts, 1887-1953.—The marking and ticketing of imported foods this year were again reasonably well carried out. In the early part of the year a fruiterer displayed for sale and sold "Russet Conference" potatoes as "Golden Wonders." A sample was purchased and the vendor charged with using a misleading description. Some of the potatoes were subjected to the sprouting test and some to the growing on test. These tests proved conclusively that the potatoes were "Russet Conference" and not "Golden Wonders." The case was heard in court after a postponement. The person charged was found guilty but was admonished.

*Fertilisers and Feeding Stuffs Act, 1926, and
Fertilisers and Feeding Stuffs Regulations, 1960.*

One of the samples of fertilisers and feeding stuffs submitted for chemical analysis was found to be not in conformity with the statutory declaration. It contained an excess of nitrogen and a deficiency in both phosphoric acid and potash. The discrepancy was slight, nevertheless the manufacturer was advised.

Byelaws for Regulating Street Trading.—There was again a decrease this year in the number of vehicles approved from 1,084 to 1,042. Three hundred and eighteen persons were engaged in trading from

vehicles with storage facilities outwith the City or trading from vehicles only, a decrease from 416. These figures show an overall decrease of 140, from 1,500 last year to 1,360 this year. The standards show a slight but positive improvement.

Inspections of vehicles and storage accommodation totalled 2,288. These inspections included observations taken on vehicles in operation and on vehicles engaged in street trading on Sundays.

Letters of warning for infringements of the Byelaws were sent to 17 street traders. These contraventions included failing to wear protective clothing, failing to wear a street-trading badge, and temporarily having no water for hand washing.

Seven street traders were convicted of selling milk from a vehicle without first obtaining a Certificate of Registration from the Local Authority.

Food Hygiene (Scotland) Regulations, 1959-1961.—Progress in food hygiene, if slow, has become sufficiently apparent to attract public comment. Much however remains to be done.

This year 89 written intimations listing 256 contraventions of the Regulations were sent to occupiers and owners of food businesses. Fines of £20 and £10 were imposed on the owner of an ice-cream vehicle which was in a very dirty condition and the vendor who had dirty hands and fingernails.

Inspections under the Regulations numbered 3,222, but this does not take into account the actual work done on food hygiene; when calls are made for any purpose notice is also taken of the hygienic standard and appropriate action taken.

The classes on Food and Food Hygiene conducted by the Extra Mural Studies Department of the University of Glasgow continue to be attended to capacity. Very keen interest is shown by the students and most sit the examination and gain a diploma.

Talks on Clean Food were given to several guilds and associations, including the Discussion Group of the Department of Food Science and Technology, University of Strathclyde, a class of trainee officers of the Department of Agriculture and Fisheries for Scotland and trainees to the School Meals Service. These talks were always well received.

SPECIAL SANITARY OPERATIONS.

(a) *Food and Drugs, etc.*—

	1960	1961	1962	1963	1964	1965	1966
1. Dairies—							
Registered during year ...	205	156	298	197	162	246	270
Removed from Register ...	149	215	248	153	161	272	307
On Register at 31st December ...	1,761	1,702	1,752	1,796	1,797	1,771	1,751
Number of Inspections ...	6,561	7,314	6,421	6,561	5,895	6,552	6,123
Contraventions of Orders, Acts and Byelaws ...	15	25	29	1	2	12	13
Prosecutions for same ...	—	—	1	—	2	11	13
Repairs or Improvements effected ...	3	15	22	1	—	—	—
2. Dealers in Ice-Cream—							
Registered during year :							
Premises ...	24	23	17	23	15	16	17
Vehicles ...	103	71	65	102	81	60	80
Removed from Register :							
Premises ...	35	32	32	29	31	42	39
Vehicles ...	55	87	44	106	180	88	67
On Register at 31st Dec. :							
Premises ...	462	453	438	432	416	390	368
Vehicles ...	486	470	491	504	405	377	390
Number of Inspections ...	2,842	2,537	2,357	2,564	2,192	2,299	1,983
Contraventions of Acts, Orders or Byelaws ...	8	8	16	—	5	111	70
Prosecutions for same ...	—	—	—	—	1	—	4
Repairs or Improvements effected ...	—	—	3	—	4	—	70
3. Byres for Milch Cows—							
Number of Dairy Byres as at 31st December ...	37	37	37	37	36	36	31
Number of Cows licensed for ...	1,122	1,134	1,134	1,166	1,025	1,025	969
Average number kept ...	975	928	1,038	879	741	768	733
Number of Inspections ...	238	232	265	228	234	221	251
4. Unwholesome Food—							
Number of Inspections ...	8,832	9,364	9,198	9,243	9,406	9,636	9,494
Number of Lots dealt with Assorted Foodstuffs destroyed at Inspector's instance—	2,493	2,531	2,192	2,069	2,173	2,037	2,115
With Owner's consent ...	Tons 197	Tons 149	Tons 130	Tons 107	Tons 143	Tons 126	Tons 188
	Cwts. 18	Cwts. 4	Cwts. 8	Cwts. 8	Cwts. 11	Cwts. 8	Cwts. 13
	Lbs. 27	Lbs. 77	Lbs. 54½	Lbs. ½	Lbs. 75½	Lbs. 106½	Lbs. 32
5. Food and Drugs (Scotland) Act							
Informal Samples analysed ...	3,802	3,908	3,705	3,692	3,601	3,841	3,536
Statutory Samples analysed ...	1,406	1,441	1,370	1,371	1,355	1,411	1,349
Statutory Samples found non-genuine ...	42	41	36	41	32	29	33
Proceedings instituted ...	33	29	28	25	20	18	22
Number of Convictions ...	32	28	28	25	20	18	22
Amounts of Fines imposed ...	£163	£155	£190	£155	£135	£100	£120
Number dismissed or found "Not Guilty" ...	—	—	—	—	—	—	—
Number Deserted Simpliciter ...	—	—	—	—	—	—	—
Number No Action ...	1	1	1	1	—	—	—
Number Dismissed ...	—	—	—	—	—	—	—
Number Admonished ...	1	—	—	—	—	—	—
Number Acquitted ...	—	—	—	—	—	—	—

ABSTRACT OF COURT PROCEEDINGS
ADULTERATED SAMPLES AND CONTRAVENTIONS DURING 1966.
FOOD AND DRUGS (SCOTLAND) ACT, 1956.

No. of Com- plaints	Nature of Complaint and Alleged Offence	No. of Convic- tions	Amount of Fines Imposed	No. Admon- ished	No.	No.
<i>Sausages—</i>						
15	Contained an excess of preservative ...	15	£80	—	—	—
<i>Mince—</i>						
6	Contained preservative during proscribed period	6	35	—	—	—
<i>Mince—</i>						
1	Contained colouring matter ...	1	5	—	—	—
—		—	—	—	—	—
22		22	£120	—	—	—
—		—	—	—	—	—
<i>Sweet Milk—</i>						
1	Not of substance demanded ...	1	£5	—	—	—
<i>Cheese—</i>						
1	Not of the nature or substance or quality demanded ...	1	10	—	—	—
<i>Morning Roll—</i>						
1	Not of the nature or substance or quality demanded ...	1	5	—	—	—
<i>Puff Pastry—</i>						
1	Unfit for human con- sumption ...	1	10	—	—	—
—		—	—	—	—	—
4		4	£30	—	—	—
—		—	—	—	—	—

THE FOOD HYGIENE (SCOTLAND) REGULATIONS, 1959.

<i>Ice-Cream Vehicle—</i>						
1	In a dirty condition	1	£20	—	—	—
<i>Ice-Cream Vendor—</i>						
1	Dirty hands and fingernails ...	1	10	—	—	—
—		—	—	—	—	—
2		2	£30	—	—	—
—		—	—	—	—	—

OTHER THAN FOOD AND DRUGS ACT.

THE MILK AND DAIRIES (SCOTLAND) ACT, 1914.

No. of Com- plaints	Nature of Complaint and Alleged Offence	No. of Convic- tions	Amount of Fines Imposed	No. Admon- ished	No. Deserted	No Action
13	Carrying on the business of a Dairy- man without a Certificate of Registration ...	13	£70	—	—	—

THE MERCHANDISE MARKS ACTS, 1887-1953.

Potatoes—

1	Applying a false trade description ...	1	—	1	—	—
---	---	---	---	---	---	---

THE BYELAWS FOR REGULATING STREET TRADING, 1952
(AS AMENDED).

1	Engaged in Street Trading without a Permit ...	1	—	—	1	—
—		—	—	—	—	—
15		15	£70	1	1	—
—		—	—	—	—	—
43	Grand Total ...	42	£250	1	1	—
==		==	==	==	==	==

SECTION XV

AIR PURIFICATION.

The effect of the City's Clean Air Campaign is becoming more evident from year to year. For the first time citizens have been able not only to admire the trees, shrubs and flowers in George Square, but to remark on their fragrance. The cleaning of buildings in the centre of the City and the extension of floral displays to areas adjoining George Square is adding colour to the heart of the City. Only the smoke from road transport remains to bring discomfort to the pedestrians in the shopping centres.

For the sixth year in succession, it was observed that fog in the centre of the City was either absent or less dense than in other areas which are outside smoke control.

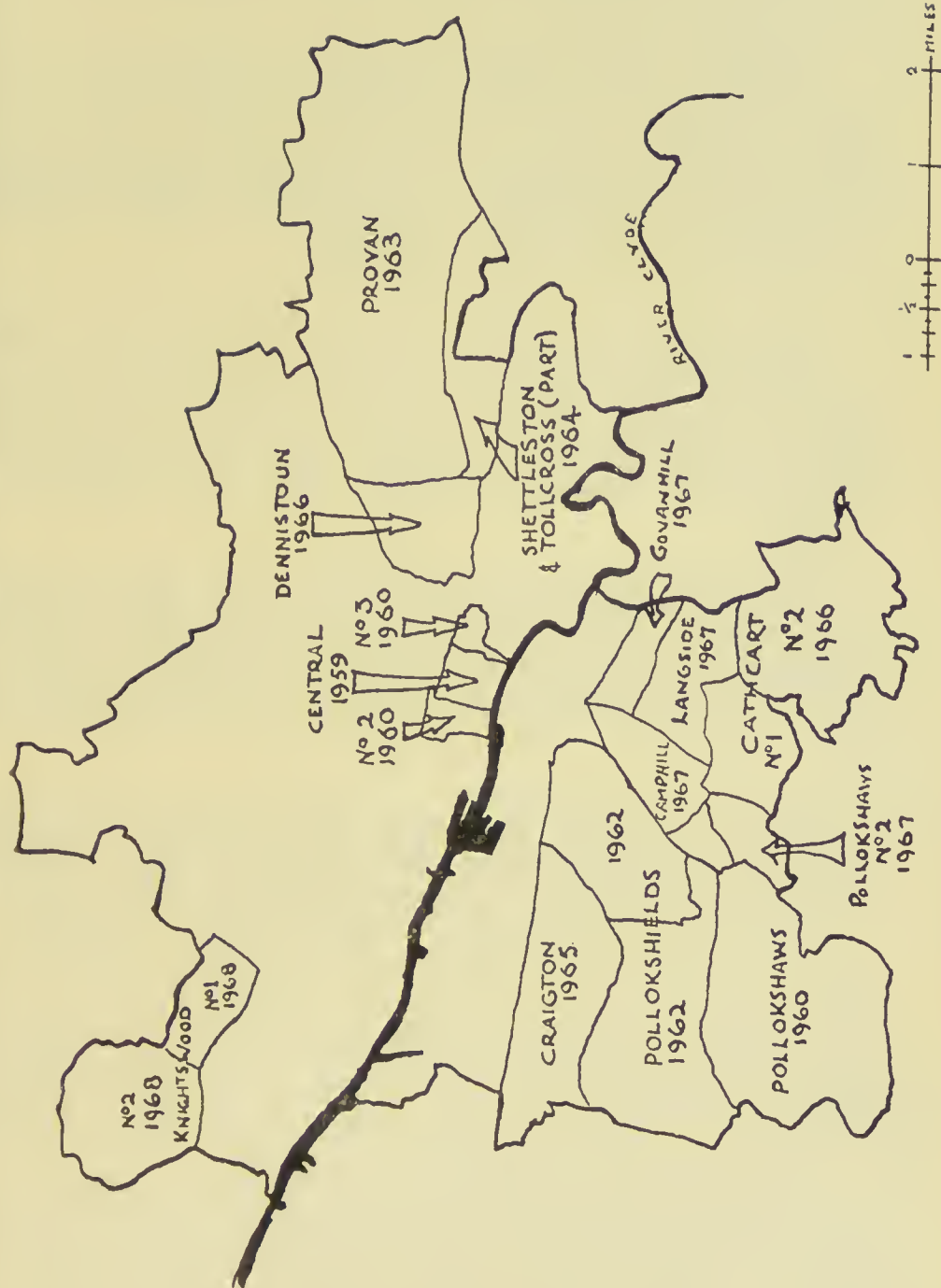
CLEAN AIR.

The Corporation's proposals to have the whole City smoke free by the early 1970's are being implemented. The Cathcart (No. 1) and (No. 2) and Dennistoun Smoke Control Area Orders came into force on the 31st August, 1966, and 31st October, 1966, respectively, bringing the total number of premises under Smoke Control Area Orders to 100,000. Orders in respect of Pollokshaws (No. 2), Camphill, Govanhill and Langside will be in force by the Autumn of 1967, and then the total number of premises covered by Orders will reach 130,000.

Orders for the Knightswood (No. 1) and (No. 2) Areas are awaiting confirmation by the Secretary of State. These Orders cover 14,427 premises and the operative date is 30th September, 1968.

Three show houses were open to the public in the Knightswood Ward and due to the lack of hall accommodation in the area, the show houses incorporated an exhibition of approved appliances. All show houses were well attended.

Preliminary survey work in respect of Fairfield and Whiteinch is nearing completion and Orders in respect of these Wards covering some 14,000 premises should be before the Corporation by the Autumn of 1967. Further preliminary work is being carried out in the Wards of Yoker and Kelvinside.



It is expected that by the end of 1967 the acreage of the City covered by Smoke Control Area Orders will be 47 per cent., and of the population 41 per cent.

Supplies of solid smokeless fuels have been reasonable, Gluco, Coalite and Rexco have all been in good supply with Barnsley Burnbrite still limited in supply. The introduction of North Sea Gas may have an effect on the supplies of Gluco from the Scottish Gas Board to future Smoke Control Areas. Existing Smoke Control Areas are not expected to be affected until the 1970's.

Changes in the application of the terms of the Clean Air Act, 1956, have allowed enhanced grant to be paid for Stoves, Gas Fires, Direct Electric Fires and (Off Peak) Storage Heaters. It is of interest to note that prior to the changes in application, 58-60 per cent. retained a solid fuel open fire whereas with enhanced grant only 35-38 per cent. so desired.

The year 1966 has been and 1967 will be, a very full year for the Smoke Control Section of the Department, approving the adaptation of fireplaces in some 40,000 houses, in areas consisting mainly of an older type property which are the very worst producers of smoke and present special problems in conversion.

Since the inception of the Clean Air Act, 1956, Glasgow has made steady progress in its campaign to make a smoke-free City. This year the City now has 100,000 premises under Smoke Control Area Orders and next year this will be increased to 130,000 premises. While there is no doubt that the extension of the Smoke Control Areas has made a visible improvement in the atmospheric conditions in the City, the full effect will not be appreciated until the whole City becomes a Smoke Control Area and the neighbouring counties have taken similar action.

Though it is estimated that industry contributes only 40 per cent. to the air pollution of a City, it has an important part to play. Over the past few years industrial managements have become increasingly efficiency conscious. With the general modernisation of industrial boiler and process plant, we are experiencing the desired effect of a reduction in air pollution. It should be remembered that efficiency of combustion is synonymous with smoke abatement.

Area.	Date of Order.	Date of Approval by Secretary of State.	Order comes into Force.	Acreage.	No. of Industrial Premises.	No. of Commercial Premises	No. of Dwellings.	No. of Other Premises
Central	11th December, 1958	15th April, 1959	15th October, 1959	201	420	3,546	253	34
Central No. 2 (Extension West of Central)	24th December, 1959	29th March, 1960	15th October, 1960	160	113	2,154	634	45
Central No. 3 (Extension East of Central)	24th December, 1959	29th March, 1960	15th October, 1960	91	48	341	1,436	15
Pollokshaws ...	24th December, 1959	29th March, 1960	15th December, 1960	2,794	36	85	10,233	203
Pollokshields ...	9th June, 1960	26th April, 1961	15th May, 1962	1,239	22	252	3,747	81
Pollokshields (No. 2)	22nd December, 1960	29th August, 1961	30th September, 1962	2,010	3	54	6,366	49
Provan	21st December, 1961	4th April, 1962	15th May and 16th August, 1963	4,845	40	185	22,364	66
Craigton	20th December, 1962	27th May, 1964	30th September 1965	1,566	29	244	12,286	87
Shettleston and Tollcross	29th April, 1963	24th October, 1963	30th September, 1964	610	19	53	5,381	20
Dennistoun ...	19th December, 1963	17th March, 1965	31st October, 1966	689	38	495	8,520 (a)	74
Cathcart (No. 1)	10th September, 1964	12th March, 1965	31st August, 1966	641	4	387	5,244	57
Cathcart (No. 2)	10th September, 1964	12th March, 1965	31st August, 1966	2,096	3	300	13,669 (b)	36
Pollokshaws (No. 2)	10th September, 1964	6th June, 1966	31st August, 1967	288	Nil	39	1,931	7
Campbell	23rd December, 1965	30th August, 1966	30th November, 1967	481	16	761	7,957	143
Govanhill	23rd December, 1965	30th August, 1966	30th November, 1967	365	10	587	8,848	29
Langside	23rd December, 1965	30th August, 1966	30th November, 1967	801	10	495	9,319	192
Knightswood (No. 1)	15th September, 1966	(Awaiting Confirmation)	(Awaiting Confirmation)	544	12	87	3,944	85
Knightswood (No. 2)	15th September, 1966	(Awaiting Confirmation)	(Awaiting Confirmation)	1,070	5	162	9,910	222

Houses in course of erection : (a) 57 ; (b) 832.

SUMMARY OF DISTRICT WORK DONE BY SMOKE INSPECTORS
DURING 1966.

It will be seen from the figures submitted below that the Air Purification Section of the Department has been extremely active during the year. These figures do not take into account the considerable time involved in connection with some of the complaints.

The following summary indicates the extent and general pattern of the field work carried out by the staff during the year under review :—

Number of observations of chimneys (industrial)	4,143
Number of inspections of steam boilers and other furnaces	802
Number of verbal intimations of excessive smoke	422
Number of locations inspected with respect to Section III of the Clean Air Act, 1956	108

The above figures do not include the numerous visits to domestic dwellings in the Smoke Control Areas.

Each Inspector is allocated an area of the City and is responsible for its supervision. If an industrial chimney is observed to emit smoke beyond the statutory limits, the management is notified and an inspection of the boiler plant carried out. Since the Inspectors are all qualified engineers they are able to ascertain the source of the problem and in many cases its remedy. Generally speaking, industrial concerns have been most co-operative and it is only in cases of sheer indifference or gross neglect that Court action is taken. In some instances the removal of a smoke nuisance may require a major alteration or addition to the existing plant. Since this would involve the closing down of the factory for a period permission is given to continue till the summer holidays, provided every effort is made to minimise the existing smoke conditions. When punitive action is contemplated, it is necessary for the Inspectors to work in pairs for the purpose of corroboration.

The majority of the field work is now taken up with the control of the ever increasing number of domestic dwellings coming under Smoke Control Orders. This work entails early, late, and on occasions week-end duties, since it has been established that a considerable number of tenants still burn bituminous coal during these periods.

It has become abundantly clear that as long as coal merchants are allowed to retail bituminous coal in the Smoke Control Areas, the public will buy it. Because of this, the Corporation started to gather evidence against the coal merchants concerned with a view to having a Parliamentary Bill passed prohibiting this practice. After consultations with the National Coal Board and the Coal Merchants' Association of

Scotland Ltd., a compromise was agreed on. A clause was added into their contract with the National Coal Board which the coal merchants signed on the 1st November, 1966, stating that they would not retail coal in the Smoke Control Areas on the understanding that should they do so, they were liable to have their supplies stopped. This contract also applied to the suppliers of the pre-packed bituminous coal which is commonly sold in shops in 28lb. bags. It is the responsibility of this Department to track down and obtain evidence against any merchant who has broken this contract. We have obtained evidence against several merchants who are still selling coal in the Smoke Control Areas, and this has been forwarded to the Coal Merchants' Association for their attention. It is quite clear that unless drastic action is taken against these unscrupulous merchants, this practice will continue.

Other technical duties carried out by the staff and not included in the above table are the supervision and maintenance of the volumetric air recording instruments, together with the monthly collection and replacement work in connection with the precipitation gauges.

CLEAN AIR ACT, 1956, SECTION 3. PRIOR APPROVAL APPLICATIONS.

The purpose of this section of the Act is to ensure that any new furnace being installed is "as far as practicable capable of operating continuously without emitting smoke when burning the fuel of a type for which it was designed."

Under Section 3 (2) of the Act, any person who proposes to install any new heating or process plant or alter the existing plant must, if the rating of the installation is above 55,000 B.Th.U./hr., notify the Local Authorities. In the case of the larger heating and process units, the applicants are requested to submit drawings of the proposed installation. These drawings, together with the full details, are submitted to the appropriate committee for their approval.

When a request for Prior Approval is received, a visit is made to the location to determine the necessary chimney height for the installation. With the increase in the number of oil-fired boilers burning the heavy residual oil, which has a high sulphur content, the chimney serving these units must discharge the gases at a height which will allow them to dissipate without annoyance to the neighbourhood. When calculating the necessary height for a chimney, the rating of the boiler, the type of fuel, the sulphur content of the fuel and the height of the adjoining property are taken into consideration. At times the recommended chimney height requires frequent meetings and considerable correspondence with the architects before it is agreed on,

since they feel that high chimneys spoil the aesthetics of a building. The health and well-being of the community are our responsibility and for this reason we insist that the chimney heights meet our requirements.

The total number of applications dealt with is given in the preceding table.

PLANT IMPROVEMENTS NOTED DURING THE YEAR.

Industry at present is going through a transitional period of modernisation. The number of existing steam boilers and process units converted from solid fuel to oil firing has dropped considerably compared to last year's figures. Industrial managements are now installing completely new steam and process plant, the greatest percentage of which are oil-fired. During the year in review there has been a trend amongst the smaller industrial concerns to install oil-fired air heaters rather than elaborate central heating systems. These units, which burn a gas oil with a low sulphur content, are being installed in many of the new Industrial Estates.

There are still a number of hand-fired boilers burning coal in the Glasgow area, and these units at times can be a source of smoke complaints. The ideal fuel for hand-firing is the low volatile steam coal. Unfortunately this fuel is in short supply in the Scottish Region; consequently a "smokier" fuel has to be used. In the hands of an unskilled fireman the use of this fuel will undoubtedly give rise to smoke complaints. In cases such as this we recommend the use of coke which is an excellent fuel and also smokeless. In a few years' time the hand-firing of boilers will be superseded by the automatic stokers which are a more efficient method of firing, if properly operated.

Many of the alterations have followed from our recommendations. Some of these have been extensive whilst others have been relatively simple, though nevertheless effective. It has always been the practice to record any new additions, alterations or new installations in industry which have contributed to the reduction in air pollution.

The following table indicates the various improvements that have been recorded during 1966 :—

Number of new boilers installed to give increased capacity	...	128
Number of oil-fired air heaters installed	... ..	51
Number of mechanical stokers fitted to steam boilers and other furnaces	... ..	5
Number of new chimneys erected or existing chimneys heightened	... ..	131
Number of steam boilers or process furnaces converted to oil		22
Number of improvements not included under the above headings		10

A number of the major improvements carried out during the year are as follows :—

Probably the most important and also apparent improvement during the year, has been the partial conversion of Dalmarnock Power Station from solid fuel to oil firing. In the past, the residents in the Dalmarnock area were subjected to a continual “ fall-out ” of grit and dust which was being discharged from the station chimneys. A deposit gauge which was sited approximately 100 yards to the north of the station registered a deposit figure five times that of the City average. Since the Alkali Inspector, who is responsible for the control of power generating stations, is based in Edinburgh, this Department attends to all complaints pertaining to smoke, grit, etc., from these plants. A report of our findings and recommendations is forwarded to the Alkali Inspector for his attention. This conversion has increased the efficiency of the Station and contributed greatly to the amenity of the surrounding area.

A Senior Secondary School in the north-east of the City has been a source of complaint for some time now. Every effort was made by the heating engineers to make these mechanically stoked, solid fuel-fired boilers operate smokelessly. Eventually it was decided to convert the heating plant to oil firing. This conversion has been successful and conditions are now satisfactory.

The various Hospital Boards operating in the City are at present carrying out a programme of boilerhouse modernisation. The latest hospital to benefit from this programme is Ruchill. A completely new boilerhouse has been built consisting of four steam “ package ” boilers burning oil fuel. This new installation, which is fully instrumented, replaces a battery of solid fuel-fired Lancashire boilers. This is an excellent example of a modern boilerhouse layout.

In the Bridgeton area a large firm has been the subject of persistent complaints of smoke from the chimney serving their hand-fired Lancashire boiler. Even after Court action had been taken against this concern, conditions did not improve. After a great deal of persuasion and consultation with the management, chain grate stokers were fitted to this boiler. The boiler is now working much more economically and the smoke emission is negligible.

A well-known engineering concern in the Govan area has installed a number of oil-fired air heaters in the new extension to their premises. As previously mentioned in this report, the fuel oil used has a low

sulphur content, consequently the discharge of SO_2 into the atmosphere is relatively small. The use of this fuel in industry contributes considerably to the reduction of air pollution in the heavily industrialised areas.

Another large engineering firm in the south side of the City installed a modern oil-fired package boiler. This new unit is of a higher rating than the original boiler and will meet the heavy loading conditions comfortably without emitting smoke. It was necessary that the chimney serving this boiler was of a height of 80 feet as the fuel in use was a heavy grade with a high sulphur content.

Four large economic boilers which were formerly fired by chain grate stokers burning solid fuel at a distillery in the Port Dundas area have now been converted to oil firing. These units are working very efficiently and should operate without any cause for complaint.

In the Queenslie Industrial Estate an engineering concern has converted their five sectional heating hot water boilers from mechanically stoked solid fuel to oil firing. Prior to the conversion, the Inspectors had occasion to call on this firm regarding the emission of excessive smoke on several instances. Since conditions did not improve, Court action was taken against the firm. This plant has now been operating for several months without a trace of smoke.

GRIT AND DUST.

Grit and dust are a much more intolerable nuisance than smoke. This type of nuisance is extremely difficult to track down and requires an intimate knowledge of the boiler plants in the locality. These boiler installations are eliminated one by one till the offender is found.

Section 6 of the Clean Air Act, 1956, deals with this problem. Unfortunately the Act does not specify the permissible limits in the emission of grit and dust, but only states that "the best practicable means" be used to keep it at a minimum. Since industry is extremely reluctant to spend valuable capital on an installation from which there is no productive return, a great deal of discussion is required before a firm will fit grit arrestation units. With the smaller firms, who would obviously find the cost of fitting grit arrestors prohibitive, a change of fuel is advocated. In the past the change-over has met with considerable success.

Probably the two greatest offenders in the Glasgow area now are the Braehead Generating Station and the Iron and Steel Foundries.

Though Braehead Power Station is not in the City itself, the prevailing winds carry the dust emitted across the River Clyde and deposit it in the Whiteinch area. This Generating Station burns approximately 20,000 tons per week and though the electrostatic precipitators have an extremely high efficiency it is estimated that a total of 45 tons is deposited in the City each week with a south-west wind. The Alkali Inspector has been notified of the numerous complaints against the Power Station and is now carrying out frequent checks on the dust emission.

For decades now the Iron and Steel Industry has been associated with grit and dust. During the processing of the metal there are times when a considerable efflux of grit is discharged into the atmosphere. The Alkali Inspector, who is responsible for the large foundries, is pressing the managements concerned to install gas washing and grit arrestation units. Considering the large capital costs involved, foundry management has made considerable progress with this work. It is hoped that in the not too distant future this unbearable nuisance will be a thing of the past.

PROSECUTIONS TAKEN DURING THE YEAR.

A considerable amount of time is now involved in the supervision of the Smoke Control Areas. Most of the prosecutions taken were in respect of smoke being emitted from domestic dwellings in contravention of Section 11 (Sub-Section 2) of the Clean Air Act, 1956. A substantial amount of bituminous coal is still being sold in these areas and we have found from experience that the practice of burning coal does not stop until a number of the offenders have been prosecuted. As previously mentioned in the report, it is hoped that the Coal Merchants' Association will take strong measures soon to remove the source of supply of this unauthorised fuel in the Smoke Control Areas. Warning letters were sent to old age pensioners and genuine cases of hardship who were contravening the Act. In these cases advice was given by the Inspectors on the proper firing method to be adopted in the use of smokeless fuel. Quite a few of the cases taken occurred during the week-ends and evenings when the defaulters thought there would be no supervision by the Inspectors. Many of the cases who pled guilty when called in Court had their sentences deferred for three months for further observations to be made. The Inspectors are then required to make regular observations over the stated period and report their findings to the Procurator Fiscal on the recall of the cases.

During the year 68 prosecutions were taken in respect of domestic smoke offences in the Smoke Control Areas. In addition, 302 warning letters were given. All cases are dealt with by the Stipendiary Magistrate in the Central Police Court. The following are the findings of the Court :

- 26 Pled guilty and were admonished after sentence had been deferred for further observations to be made.
- 14 Pled guilty and were admonished.
- 16 Pled guilty and were each fined £1.
- 7 Pled guilty and were each fined £2.
- 5 Cases failed to appear. Warrants granted for their arrest.
- 125 Cases pending.

In the industrial and commercial field Court action was taken in respect of three firms for contravention of Section 1 of the Clean Air Act, 1956. All pled guilty and were each fined £5.

SHIPPING, DOCK AND HARBOUR AREAS.

Routine and special observations were carried out in the harbour and river areas lying within the City boundaries. During the year under review there was a considerable reduction in the number of complaints regarding smoke from vessels berthed in the City docks. This can be attributed to the decrease in the number of foreign-going vessels trading to the City and the increasing awareness of the ships' engineering staffs of the Clean Air Act Regulations. The majority of the visits carried out were on board foreign registered vessels.

In order to ascertain the cause of any smoke emissions, an inspection is carried out of the boiler room plant in the presence of the ship's engineers. As the Smoke Inspectors are all certificated marine engineers they are well qualified to offer technical advice which will reduce or remove the problem.

It should be appreciated that a foreign-going vessel which has been trading for several months requires certain essential repairs and overhauls to be carried out while in port. Since the boiler auxiliary systems are included in these overhauls, there are occasions when it is extremely difficult to avoid the emission of smoke. Generally speaking, the engineering staffs on these vessels have co-operated fully with the Department in keeping the emission of smoke to a minimum.

Probably the most common time for complaint is when a vessel is arriving or departing from the harbour area. When a ship is berthing a considerable amount of engine manoeuvring is required. In the steamships this causes a fluctuating demand on the steam supply with the consequent frequent shutting down and "flashing-up" of boiler

fires. It is during these "flashing-up" periods that the emission of smoke can be excessive. With this type of complaint the Shipping Line concerned is notified that greater care should be taken in the future during the manoeuvring period.

It is only in the cases of gross negligence to comply with the Clean Air Act that punitive action is taken.

RAILWAYS AND SERVICING DEPOTS.

The steam locomotive in the past was one of the most persistent sources of smoke and grit complaints. The steady reduction in the number of these locomotives operating in the City area has brought with it a marked decline in the number of complaints. Occasionally main line steam locomotives operating from the City terminal stations have been reported to the Railway Authorities for emitting excessive smoke. These reports have always been speedily investigated by British Railways and action taken.

In the past the Railway Servicing Depots were a constant source of air pollution. Though each locomotive in itself was not emitting excessive smoke the accumulative effect of perhaps twelve locomotives created a considerable amount of pollution. Fortunately most of these depots have been converted to deal with Diesel units and the problem of smoke has largely disappeared. The increasing numbers of Diesel locomotives now in service have reduced considerably the amount of smoke and grit in the area. It must, however, be stressed that these Diesel units, if not properly maintained, can also be a source of air pollution.

The modernisation programme of British Railways has in no small way contributed to the reduction of air pollution throughout the City.

EDUCATIONAL ACTIVITIES—TRAINING OF OPERATIVES. ANNUAL WINTER COURSES IN BOILER HOUSE PRACTICE AND SMOKE ABATEMENT.

As in the past the various Departments of the Glasgow Corporation and industrial premises within the Glasgow area were notified of the arrangements for the resumption of the classes. Circulars were forwarded to the interested parties and a notice of the class resumption dates published in the Glasgow press. Circulars were also sent to several of the Local authorities adjacent to the City of Glasgow who have shown an interest in the course in the past. The classes were held on

Tuesdays and Thursdays of each week between the hours of 7.30-9.15 pm., in the Lecture Room, Health and Welfare Department, 20 Cochrane Street, Glasgow, C.1. Since most of the students have early, late and on occasions overtime shifts, they have the opportunity of attending either the Tuesday or the Thursday lectures. The class is again indebted to the Corporation for the facilities provided. The nominal fee of 7s. 6d. was charged for the course. Formerly the fee was 5s. but it was agreed at the Annual General Meeting of the Scottish Division of the National Society for Clean Air that this should be increased to 7s. 6d. this session.

The total enrolment for the year was 44 and was made up of 35 in the first year and 9 in the advanced year. Though the total enrolment has dropped by five on last year, this should not be attributed to the increase in the entrance fee but rather to the current state of flux of manpower in industry.

Considering the difficulties involved due to shift-work, the general attendance was good, namely, 79.8 per cent. in the ordinary and 70.8 per cent. in the advanced, giving a combined figure of 75.3 per cent. The total number of lectures given was 31 and in addition two refresher lectures of $2\frac{1}{2}$ hours each were given to the students who wished to go forward for the Boiler Operator's Certificate Examination of the City and Guilds of London Institute.

The class examination was held on the 21st February, 1967, between the hours of 7.00-9.30 p.m. A total of 29 attended, 23 taking the ordinary and 6 the advanced. The Society has each year presented book prizes to the students with the highest marks in each section and who are *bona fide* boiler operators or men of similar status. Eighteen men in the ordinary and five in the advanced gained Merit Certificates.

Two visits of educational value in the industrial field were made during the session, one to Braehead Generating Station and the other to the underground workings of Cardowan Colliery, Stepps. Both visits were extremely interesting and informative.

ATMOSPHERIC POLLUTION MEASUREMENT AND RECORDINGS.

Another important field covered by this section is the testing of the atmospheric conditions prevailing throughout the City. This aspect of the work is the responsibility of a technical assistant whose duties include the supervision and recording of the observations obtained from the daily, weekly and monthly instruments. Assistance is also given by the nursing staff where the instrument is installed in a clinic.

This work is carried out in co-operation with the Ministry of Technology to which all the data obtained are forwarded for inclusion in the National Survey.

The apparatus in use at present is as follows :

SOOT, DUST, ETC. (BRITISH STANDARD DEPOSIT GAUGE).

Glasgow Area 11 Stations

Country Areas 3 Stations

VOLUMETRIC SMOKE/SO₂ APPARATUS.

In National Survey 12 Stations

Others 2 Stations

The concentrations of sulphur dioxide and smoke (with other suspended matter) are measured daily by 14 instruments in selected locations throughout the City. Six of these instruments are fully automatic, giving daily readings for one week without attention. These automatic instruments are excellent time-saving devices.

Comparative figures for smoke and sulphur dioxide concentrations for one site in the Central Smoke Control Area are given in the following tables :—

SMOKE CONCENTRATION—MICROGRAMMES PER CUBIC METRE.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964	353	295	274	155	99	95	75	101	122	273	371	286
1965	305	627	208	104	82	69	62	63	134	245	279	432
1966	378	220	167	136	114	116	57	114	144	254	303	267

SO₂ CONCENTRATION—MICROGRAMMES PER CUBIC METRE.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964	342	255	219	168	79	72	58	75	104	230	351	240
1965	241	407	198	145	106	62	57	69	100	182	222	323
1966	289	204	209	143	125	111	68	109	117	219	302	256

It will be observed from the above tables that on the whole, concentrations of both elements (*i.e.*, smoke and sulphur dioxide) are higher than the corresponding figures for the year 1965. The increase may be partially attributed to the fact that the solid fuel-fired central heating boiler plant in the Municipal Buildings was replaced by a

modern oil-fired system. The chimney serving this unit must be extended to allow the higher sulphur dioxide content of the exhaust gases to be dissipated into the atmosphere. This work is at present in hand and should be completed by Summer 1967. Another factor involved is the siting of the inlet funnel to the apparatus. This inlet is approximately thirty feet above street level in which many vehicles (especially heavy lorries) are left parked for loading and unloading purposes with their engines running.

DEPOSIT GAUGES.

There are eleven such stations in use within the City boundaries, with three additional country sites at Loch Katrine, Mugdock and Darnley Water Works. The country sites allow a comparison with the City conditions.

The figures at the end of this report have been calculated from the reports submitted by the Corporation Chemist in his analysis of the monthly samples from the various stations.

DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR 1965 and 1966.

						Tons per Square Mile per Annum.	
						1966	1965
Tar	...	...	...	...	...	3.41	3.39
Carbonaceous other than Tar				...	...	34.98	31.38
Ash	...	...	...	...	...	86.35	84.86
Total Insoluble Matter			...	...	...	124.74	119.63
Total Soluble Matter	...		...	...	...	69.99	70.32
Total Solids	...	...	...	...	...	194.73	189.95
Rainfall in Millimetres			...	...	...	1,005.00	1,002.00

The above figures show an overall similarity to the corresponding figures for 1965. Weather plays an important part in the determination of air pollution by deposit gauge. It is known that heavy showery weather at frequent intervals does not have the same "scrubbing" effect as lighter, more continuous rainfall.

AVERAGE DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR EACH MONTH OF 1966.

ENGLISH TONS PER SQUARE MILE.

	Month	Rainfall in millimetres	INSOLUBLE MATTER					Included in Soluble		TOTAL SOLIDS						
			Tar	Carbonaceous less Tar	Ash	Total Insoluble Matter	Total Soluble Matter	Total Solids, 1966	Sulphate as SO ₄	Chloride as Cl.	1965	1964	1963	1962	1961	1960
Mean of 11 Stations	January	54	0.35	3.37	10.15	13.87	7.50	21.37	2.50	0.89	20.86	19.25	20.85	38.27	22.31	20.56
"	February	92	0.38	5.00	11.95	17.33	6.29	23.62	2.05	1.01	10.11	14.22	7.62	20.84	19.54	21.70
"	March	64	0.23	3.05	6.55	9.83	5.80	15.63	1.57	1.39	24.51	20.09	23.64	18.68	15.06	18.01
"	April	69	0.32	1.90	5.68	7.90	4.27	12.17	1.23	0.73	16.99	21.38	14.59	19.33	18.54	17.24
Mean of 10 Stations	May	76	0.26	2.86	9.46	12.58	3.84	16.42	1.29	0.60	11.37	13.50	14.73	20.62	10.97	18.07
Mean of 11 Stations	June	132	0.24	1.77	5.54	7.55	7.30	14.85	2.03	1.30	15.01	14.87	12.12	13.12	11.88	13.51
"	July	55	0.25	1.40	3.84	5.49	3.61	9.10	0.91	0.45	10.35	12.96	10.08	9.24	17.40	14.25
"	August	98	0.15	1.92	7.94	10.01	4.73	14.74	1.38	0.37	13.37	16.49	11.36	10.92	13.97	15.01
"	September	89	0.26	1.61	4.66	6.53	4.61	11.14	0.97	0.80	13.52	12.71	13.63	20.73	19.03	13.92
"	October	81	0.36	2.83	5.31	8.50	4.68	13.18	1.71	0.49	19.79	16.56	10.00	14.03	20.06	17.02
"	November...	80	0.36	6.18	8.73	15.27	9.51	24.78	2.32	2.77	13.80	18.80	23.62	18.40	22.99	22.56
"	December	115	0.25	3.09	6.54	9.88	7.85	17.73	2.28	2.61	20.27	18.35	17.25	21.37	25.01	24.91
Yearly Deposit in tons per square mile		1005	3.41	34.98	86.35	12.74	69.99	194.73	20.24	13.41	189.95	199.18	179.49	225.55	216.76	216.76
Monthly mean of all Gauges		8.40	0.28	2.92	7.20	10.40	5.83	16.23	1.69	1.12	15.83	16.60	14.95	18.80	18.06	18.06

SECTION XVI

GENERAL SANITARY OPERATIONS.

The City is divided into 37 Wards which, for convenience, are administered in five Public Health Divisions, shown as follows :—

EAST.		NORTH.		CENTRAL.	
Ward No.		Ward No.		Ward No.	
1.	Shettleston and Tollcross.	8.	Cowlairs.	11.	Exchange.
2.	Parkhead.	9.	Springburn.	12.	Anderston.
3.	Dalmarnock.	10.	Townhead.	13.	Park.
4.	Calton.	14.	Cowcaddens.	19.	Kelvinside.
5.	Mile End.	15.	Woodside.	20.	Partick (East).
6.	Dennistoun.	16.	Ruchill.	21.	Partick (West).
7.	Provan.	17.	North Kelvin.	22.	Whiteinch.
		18.	Maryhill.	23.	Yoker.
				24.	Knightswood.
SOUTH-EAST.			SOUTH-WEST.		
Ward No.		Ward No.			
25.	Hutchesontown.	27.	Kingston.		
26.	Gorbals.	28.	Kinning Park.		
33.	Camphill.	29.	Govan.		
34.	Pollokshaws.	30.	Fairfield.		
35.	Govanhill.	31.	Craigton.		
36.	Langside.	32.	Pollokshields.		
37.	Cathcart.				

The area, population and average density (persons per acre) of each Division in the year 1966 as compared with 1957 was as follows :—

			1966		1957		
		Area	Population	Density	Population	Density	
Central	...	7,050	204,050	28	217,053	30	
North	...	8,172	189,037	23	240,369	30	
East	...	8,855	230,116	26	227,173	26	
South East		8,246	209,318	25	211,580	25	
South West		7,402	147,277	19	183,625	25	
City	...	39,725	979,798	24	1,079,800	27	
North of the River 1966 ...			623,203	South of the River 1966			356,595
			1957 684,595				1957 395,205

The population of the City is now below the one million mark, 100,002 fewer than in 1957.

The following table, which is based on information supplied by the City Assessor, shows the number of occupied and unoccupied houses in each division as at Whitsunday, 1966 and 1957 :—

		Number of Houses					
		1966			1957		
		Occupied	Empty	Total	Occupied	Empty	Total
Central	...	66,925	1,779	68,704	68,068	946	69,014
North	...	62,877	2,587	65,464	69,219	705	69,924
East	...	72,724	1,478	74,202	67,922	576	68,498
South-East	...	67,335	1,054	68,389	68,219	806	69,025
South-West	...	47,854	1,259	49,113	50,922	514	51,436
		<u>317,715</u>	<u>8,157</u>	<u>325,872</u>	<u>324,350</u>	<u>3,547</u>	<u>327,897</u>

This table shows the reduction which has taken place in the number of houses in the City. Many of the empty houses are awaiting demolition and are thus not available for occupancy. The probable loss of houses in the ten-year period is nearer 5,000 than the net loss of 2,000, this despite the building of 39,084 houses by the Corporation and other agencies during the years 1957-1966, an indication of the effect of Slum clearance and comprehensive development on the City.

The following is a brief account of the work undertaken by the Sanitary Section as summarised in Appendix Table XV.

At this point it is necessary to emphasise the grave difficulties under which each Division of the City is operating because of the lack of qualified staff. Out of an authorised establishment of 113 Sanitary Inspectors, including Divisional Inspectors, there are 31 apprentices and 8 survey officers, recruited for the specific purpose of carrying out initial surveys under the Offices, Shops and Railway Premises Act and 60 qualified Sanitary Inspectors, a shortage of 14 in the establishment.

This imbalance between qualified and unqualified staff, places considerable strain on the qualified staff and does not make for complete efficiency ; a number of important duties are not receiving the attention that they should.

PUBLIC HEALTH (SCOTLAND) ACT, 1897—NUISANCES.

Nuisance abatement still remains the basic function of the Section. In addition to the detection and abatement of nuisances in the City as a whole there is the special problem of nuisance in Comprehensive Development Areas. As soon as an area is so designated, day to day

repair to property is reduced to a minimum and nuisances result. During 1966, 61,544 nuisances were dealt with compared with 58,683 in 1965, an increase of approximately 1,070. Most cases were abated on service of formal intimation in terms of Section 19, but recourse to statutory procedure was necessary in 214 instances.

The following table shows the relevant details relating to the five Divisions :—

NUMBER OF NUISANCES ABATED.

Division			1966
Central	...	...	14,275
Northern	...	...	17,441
Eastern	...	...	12,232
South-Eastern	...	...	6,622
South-Western	...	...	10,974
City	...	...	<u>61,544</u>

PROCEEDINGS IN COURT IN TERMS OF PUBLIC HEALTH (SCOTLAND) ACT.

Division			Number of Nuisances Submitted to Sheriff Court	Number Decided in favour of Pursuer	Number Unsuccessful	Number Continued	Costs £ s. d.			Expenses £ s. d.		
Central	...	...	177*	102	—	55	4,356	2	4	182	19	0
Northern	...	...	10	5	—	5	3,369	13	3	87	3	0
Eastern	...	...	8	7	—	1	318	2	8	33	12	0
South-Eastern	...	...	9	9	—	—	40	2	10	10	10	0
South-Western	...	...	10	9†	—	6†	41	10	0	22	1	0
City	...	...	<u>214</u>	<u>132</u>	—	<u>67</u>	<u>8,125</u>	<u>11</u>	<u>1</u>	<u>336</u>	<u>5</u>	<u>0</u>

* Includes 20 Notices cancelled after entry in Court.

† „ 3 from 1965.

‡ „ 2 „ 1965.

THE GLASGOW CORPORATION ORDER CONFIRMATION ACT, 1959.

The above Order gives Local Authority powers to deal with choked drains on the failure of owners after 48 hours' notice. This Order has been very helpful in expediting the removal of serious nuisance conditions in properties in a comparatively short time, and avoids the rather long procedure necessary to deal with nuisance in terms of the Public Health (Scotland) Act.

TABLE SHOWING ACTION TAKEN UNDER
THE GLASGOW CORPORATION ORDER CONFIRMATION ACT, 1959.

Division		Number of Notices Issued	Cleared by Owner within Statutory Period		Cleared by Corporation	
			No.	Percentage	No.	Percentage
Central	...	2,895	2,450	84.6	445	15.4
Northern	...	5,314	4,788	90.0	532	10.0
Eastern	...	5,148	4,858	94.6	289	5.4
South-Eastern	...	1,968	1,655	83.0	313	17.0
South-Western	...	3,334	3,221	96.6	113	3.4
City	...	18,659	16,972	89.76	1,692	10.2

THE HOUSING (SCOTLAND) ACTS, 1950-64.

The number of houses closed or demolished in terms of the above Act showed a slight increase over the year 1965 and while the reduction of unfit houses is cause for satisfaction much still remains to be done. Over the past decade the more grossly unfit houses have been dealt with, particularly those properties where four or five households use a common water closet. Nevertheless at the present rate of progress in terms of available alternative accommodation, many years will elapse before common water closets become a thing of the past.

The following table indicates the number of houses dealt with by this Department under the Housing Acts, by Dean of Guild action or by private closure or demolition.

DETAILS OF HOUSES DEALT WITH DURING 1966 UNDER HOUSING ACT BY DEAN OF GUILD ACTION OR BY PRIVATE CLOSURE OR DEMOLITION.

Division	Closing Order or Demolition Order under Housing Act	Dealt with under Dean of Guild Procedure	Private Closures or Demolitions	Corporation Houses, Closures or Demolitions	Total
Central ...	531	88	38	825	1,482
Northern ...	458	236	—	1,066	1,760
Eastern ...	685	10	12	20	727
South-Eastern ...	331	81	28	1,003	1,443
South-Western ...	482	305	59	326	1,172
City ...	2,487	720	137	3,240	6,584

ABANDONED PROPERTIES.

There was a considerable decrease in the total number of houses abandoned during the year, from 1,145 to 715, no doubt due to quicker action in terms of the Housing Acts in dealing with properties that are likely to be abandoned.

NUMBER OF PROPERTIES AND HOUSES RECORDED AS
ABANDONED AS AT DECEMBER, 1966.

Division	...	...	Number of Properties	Number of Houses
Central	...	...	7	49
Northern	...	...	19	209
Eastern	...	...	28	314
South-Eastern	...	...	4	39
South-Western	...	...	13	104
City	...	...	<u>71</u>	<u>715</u>

GLASGOW CORPORATION (GENERAL POWERS) ORDER, CONFIRMATION ACT, 1960/62. BYE-LAWS MADE THEREUNDER.

The enforcement of bye-laws made under the above Order for the maintenance of cleanliness of precincts of premises as indicated hereunder is the responsibility of the Sanitary Inspector.

CLEANSING OF COMMON CLOSES AND STAIRS.

A considerable part of the inspector's time is taken up with complaints concerning the washing of the common close and common stair, usually as a result of disagreement between neighbours. During the year enforcement action was necessary in 1,158 instances where common closes and stairs were not being cleansed and where rotation cards were issued by the Department.

TABLE INDICATING THE NUMBER OF INSTANCES
ENFORCEMENT ACTION WAS NECESSARY.

Central	...	...	...	424
Northern	...	...	...	459
Eastern	...	...	...	58
South-Eastern	...	...	...	—
South-Western	...	...	...	217
City	...	...	...	<u>1,158</u>

Court proceedings were necessary in 25 instances where householders failed to observe their turns as indicated on the rotation cards.

REDECORATION OF WALLS OF CLOSES AND STAIRCASES.

An important factor in maintaining the amenity of tenement property is the cleanliness of the upper and lower walls of closes and staircases. Surveys of the City are carried out from time to time to determine where owners are allowing these to become grossly dirty, and if so, a notice is served on them requiring them to redecorate. In many instances this work is carried out by the owners without enforcement by the Department.

The undernoted table indicates the action taken during the year.

TABLE SHOWING NUMBER OF CLOSES LIME-WASHED OR PAINTED.

Division	As a Result of Notice	Voluntary by Owners	Total
Central	728	113	841
Northern	394	224	618
Eastern	295	215	510
South-Eastern ...	124	74	198
South-Western ...	153	53	206
Total	<u>1,694</u>	<u>679</u>	<u>2,373</u>

FARMED-OUT HOUSES.

A further seven houses were reported to the Committee with a view to having them declared farmed-out houses in terms of the Act. This brings the total of houses registered at the end of the year to 42.

The table below indicates the present position.

GLASGOW CORPORATION CONSOLIDATION (GENERAL POWERS) ORDER
CONFIRMATION ACT, 1960.

Division	No. of Declared Farmed-out houses during year ended 31.12.66	No. of Farmed- out houses Regd. during year ended 31.12.66	No. of Farmed- out Houses deleted during year ended 31.12.66	Total No. on Register as at 1.12.66
Central ...	—	—	—	—
Northern	2	2	—	8
Eastern ...	3	8	1	24
South-Eastern	—	—	—	8
South-Western	2	2	—	2
Total ...	<u>7</u>	<u>12</u>	<u>1</u>	<u>42</u>

RODENT CONTROL OPERATIONS.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

This Act gives the Local Authority power to require occupiers of premises to keep their premises free from rats and also places on them the responsibility of reporting to the Local Authority any infestation that may occur on their premises or lands. To facilitate proper action being taken to deal with rat infestations, the Department operates a Rodent Control Service which is available to anyone requiring their premises to be dealt with.

Infestation is present throughout the City, heavier in some areas than others. Several factors would appear to be responsible for its continuance, for example—the conditions arising from dilapidation of washhouses and ashbin shelters which afford harbourage and feeding for the rats, and also the disturbance by demolition of property over wide areas. Considerable time is spent in investigating complaints and planning operations to deal with the situation. Warfarin, a blood anti-coagulant is being used almost exclusively for the destruction of rats and mice. However, it has been necessary to use acute poisons in some instances where Warfarin resistance in the rat has been suspected. Trapping has also been resorted to.

The following table indicates the number of premises found infested and treated during 1966.

RODENT CONTROL.

Division		No. of Premises found infested	No. of Premises Treated	No. of Premises Proofed
Central	...	1,172	1,172	320
Northern	...	1,437	1,437	128
Eastern	...	760	760	49
South-Eastern	...	830	830	83
South-Western	...	550	550	126
Total	...	<u>4,749</u>	<u>4,749</u>	<u>706</u>

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963.

During the year 1966, progress has been made in connection with the implementation of the above Act.

Premises on register at the end of the year number 12,922, and include 1,333 new registrations. In the course of the year 861 premises were taken off the register as they ceased to function or were outwith the scope of the Act. The number of persons employed in the registered premises is 134,632, including 75,045 females and 59,587 males. From

the above it would appear that about 50 per cent. of the premises estimated to come within the scope of the Act in the City have been registered. A systematic survey is being carried out on a geographical basis, and it is inevitable that some considerable time will elapse before all premises will have a general inspection.

During 1966, 4,206 general inspections were carried out and 11,959 other inspections, including revisits to premises where general inspections have been made. In the course of inspection a total of 10,448 contraventions were noted. These were brought to the attention of the occupiers or owners of the premises, and at the end of the year 5,991 contraventions had been remedied as indicated in Table II.

Since the coming into force of the Act a total of 7,181 general inspections of premises have been carried out. Unfortunately, many of the occupiers and owners have made no attempt to implement the requirements of the Act, but wait until visited by the enforcement officer.

There is also apparent apathy among the employees : little or no complaint is being made that the Act is not being implemented.

An important aspect is the investigation of the cause of accidents occurring within premises covered by the Act.

The undernoted table indicates the number of accidents reported during 1966.

Division	Offices	Retail Shops	Wholesale Shops and Warehouses	Catering Estab- lishments	Canteens	Fuel Storage Depots	Total
Central ...	35	81	20	7	4	—	147
Northern ...	2	8	3	1	—	—	14
Eastern ...	6	12	2	—	1	—	21
South-Eastern	2	23	5	3	—	—	33
South-Western	1	18	11	1	—	1	32
City ...	46	142	41	12	5	1	247

FOOD HYGIENE (SCOTLAND) REGULATIONS, 1959/61.

This important function falls to the sanitary inspector. Owing to the shortage of staff, the number of inspections is less than would have been wished.

TABLE I.
NUMBER OF PREMISES REGISTERED AND INSPECTED IN EACH DIVISION DURING THE YEAR.

Number of Premises Registered as at 31.12.66										Number of Premises Inspected										Total Number of Visits	
Division	Offices	Retail Shops	Wholesale Shops and Warehouses	Catering Estab. and Canteens	Fuel Storage Depots	Total Number Regis- tered	Offices		Retail Shops		Wholesale Shops and Warehouses		Catering Estab. and Canteens		Fuel Storage Depots						
							G.I.	O.I.	G.I.	O.I.	G.I.	O.I.	G.I.	O.I.	G.I.	O.I.	G.I.	O.I.			
Central ...	3,341	1,807	463	387	3	6,001	83	1,183	147	2,852	88	1,365	25	335	—	—	343	5,735			
Northern ...	280	1,014	63	214	4	1,575	61	136	443	1,253	5	18	78	275	—	—	587	1,682			
Eastern ...	409	1,112	100	201	2	1,824	130	107	451	761	13	21	21	15	1	3	616	907			
South-East ...	426	1,299	69	180	—	1,974	156	205	1,152	1,510	44	—	92	101	—	1	1,444	1,817			
South-West ...	338	952	69	187	2	1,548	142	111	883	1,576	70	40	121	87	—	4	1,216	1,818			
Total ...	4,794	6,184	764	1,169	11	12,922	572	1,742	3,076	7,952	220	1,444	337	813	1	8	4,206	11,359			

G.I. = General Inspections, O.I. = Other Visits.

TABLE II.

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963. CONTRAVENTIONS FOUND AND REMEDIED IN YEAR 1966.

See-	NATURE OF CONTRAVENTION	Offices		Retail Shops		Wholesale Shops and Warehouses		Catering Establishments		Canteens		Fuel Stores	
		Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied	Found	Remedied
4	Cleanliness ...	108	73	463	283	78	102	53	56	—	—	—	—
5	Overcrowding ...	2	—	3	2	2	1	—	—	—	—	—	—
6	Temperature ...	177	109	943	599	85	71	122	112	—	—	1	1
7	Ventilation ...	81	3	481	190	93	43	47	37	—	—	—	—
8	Lighting ...	96	44	248	124	142	84	29	25	—	—	—	—
9	Sanitary Conveniences ...	269	120	1,434	550	225	85	75	67	—	—	—	—
10	Washing Facilities ...	204	76	652	317	162	73	45	38	—	—	—	—
11	Drinking Water ...	53	37	112	84	71	31	3	4	—	—	—	—
12	Accommodation for Clothing ...	20	31	115	46	18	5	13	6	—	—	—	—
13	Seating Arrangements ...	3	12	183	87	7	3	7	7	—	—	—	—
14	Seats for Sedentary Workers ...	56	28	24	16	32	14	1	—	—	—	—	—
15	Eating Facilities ...	13	3	72	16	25	4	2	3	—	—	—	—
16	Floors, Passages, Stairs ...	156	101	548	389	163	89	410	293	—	—	—	—
17	Fencing Exposed Machinery ...	7	7	32	21	4	6	2	4	—	—	—	—
19	Dangerous Machines. Training and Supervision of Persons ...	—	1	—	1	2	—	1	—	—	—	—	—
22	Dangerous Conditions and Practices ...	—	—	—	—	—	—	—	—	—	—	—	—
23	Prohibition of Heavy Work ...	1	—	—	—	—	—	—	—	—	—	—	—
24	First Aid Provision ...	154	102	639	434	45	50	116	105	—	—	—	—
50	Information for Employees ...	172	107	681	409	65	67	99	56	—	—	1	—
	Total ...	1,572	881	6,630	3,568	1,219	728	1,025	813	—	—	2	1

The following table shows the number of premises in each division and the number of inspections made.

Division	No. of Premises in Division	No. of Premises Inspected	No. of Visits
Central	1,099	172	210
Northern	783	239	2,369
Eastern	986	188	250
South-Eastern	1,033	378	770
South-Western	630	592	680
City	<u>4,531</u>	<u>1,569</u>	<u>4,279</u>

FACTORIES ACT, 1961.

The following table indicates the number of factories registered and inspected during the year 1966 to ensure that the sanitary accommodation was adequate and maintained as laid down in the Regulations.

Division	Mech.	Non-Mech.	Building Operations or Works of Engineering Construction	Total	Mech.	Non-Mech.	Building Operations or Works of Engineering Construction	Total
No. of Premises Registered at 31.12.66					No. of Inspections			
Central	1,333	56	31	1,222	987	46	31	1,064
Northern	465	10	76	551	644	60	172	876
Eastern	610	58	15	683	675	35	26	736
South-Eastern	472	71	21	564	686	387	24	1,097
South-Western	469	36	24	529	482	25	24	531
City	<u>3,149</u>	<u>231</u>	<u>167</u>	<u>3,547</u>	<u>3,474</u>	<u>553</u>	<u>277</u>	<u>4,304</u>

DRAINAGE.

Drains and plumbing work require to be installed in accordance with the terms of the Building Standard (Scotland) Regulations, 1963. These determine the methods and the quality of materials to be used. The considerable amount of building activity in the City has made heavy demands on the inspectors who have to scrutinize plans and carry out inspections during installation of work and, on its completion, to ensure soundness of construction.

The undernoted table indicates the number of consultations and the number of tests carried out during the year.

Division	No. of Consultations re drainage schemes	No. of Applications of tests of new work	No. of Applications of tests to existing work
Central	972	490	—
Northern	147	745	4
Eastern	282	773	—
South-Eastern	324	2,977	—
South-Western	340	443	—
City	<u>2,065</u>	<u>5,428</u>	<u>—</u>

AGED AND INFIRM PERSONS.

The problem of old people living alone, particularly when they are infirm, is an increasing one. Some years ago a register was compiled of all elderly persons living alone and from time to time the Health Visitor or Public Health Nurse visits to ensure that the needs of these persons are being met, particularly with regard to maintaining the cleanliness of the house. These visits have been of tremendous benefit to many old people who have reached the stage where they are unable to look after their homes, and would have been in dire straits had the Public Health Visitor not called.

The following table indicates the number of old people registered and action taken :—

Division	Males	Females	Total	Houses Cleaned	Compassionate Washings
Central	747	1,496	2,243	53	1,359
Northern	735	1,533	2,268	28	1,169
Eastern	449	1,066	1,515	112	761
South-Eastern ...	539	1,080	1,619	111	295
South-Western ...	467	1,204	1,671	15	49
City	2,937	6,379	9,316	319	3,633

Another important duty of the Public Health Nurse is the frequent inspection of certain Corporation houses to ensure that these are being maintained in a clean condition and also to advise the housewife on any problem regarding the maintenance of the house, etc. They also carry out inspection of children in schools. Details of their activities are shown in Table XV on pages 417 and 418.

MERCURY POISONING.

In February 1966, the Department was informed by a consultant physician that a family of husband, wife and three children had been admitted to the Western Infirmary in January and found to be suffering from mercury poisoning. The husband had complete exfoliation of the skin and a boy of 14 encephalopathy. The Department was asked to investigate the home circumstances.

The boy of 14 stated that he had taken mercury in a jar from school and contamination of the three apartment ground floor house occurred due to spillage of mercury, which was distributed throughout all apartments.

Collection and inactivation of the mercury consisted of the use of a powerful industrial vacuum throughout the house including its use on furniture. All furniture, linoleum, and carpets were then removed to

a store in order that the floor area of all the rooms in the house be exposed. Thereafter, all floors and walls to a height of 2 feet were covered with a mixture of slaked lime and flowers of sulphur. This was left for 24 hours before being removed and the area then thoroughly washed with water. The house was kept empty and heated to assist mercury vapour evaporation.

When the vacuum was in use, the air from the vacuum was discharged through flexible tubing, the end of which was submerged in a 150 gallon tank placed outside the house and containing water with the addition of a spadeful of lime and sulphur. The tank was covered with tongued and grooved boarding to prevent spillage. When the mixture was removed from the floor and walls, this was added to the tank and the greater proportion of the tank contents discharged to the nearest suitable sewer and the remainder, together with the tank was buried in a corporation coup. In addition, all metal culinary utensils were destroyed and replaced by the Department.

An interesting finding was the amount of mercury in the trap beneath the kitchen sink—an indication that the family had attempted to collect and dispose of the mercury after the jar had been overturned. No mercury was found in the traps beneath the washhand basin or toilet.

The City Analyst collected air samples from the house over the following three weeks to ascertain the mercury vapour concentration in the atmosphere, before the family returned home.

RAG, FLOCK AND OTHER FILLING MATERIALS ACT, 1951.

Two applications for registration under the above Act were received during the year. After inspection, certificates of registration were granted in both cases.

Four firms renounced their registrations and were removed from the register which now has a total of 59 premises as compared with 61 last year.

Two licences were cancelled by the firms, leaving the number of licensed premises at eight compared with ten in 1965.

Division				Registered Premises	Licensed Premises
Central	...	...	...	11	1
Northern	...	...	...	7	1
Eastern	...	...	...	17	3
South-Eastern	...	...	...	14	3
South-Western	...	...	...	10	—
				—	—
				59	8
				—	—

DISINFECTING SECTION.

This section carries out the disinfection of premises, clothing, books, etc., following the removal to hospital or the granting of a clearance certificate in home cases of infectious disease. It also serves the public by lending equipment and supplying materials so that the tenants themselves may do cleaning, whitewashing or distempering.

DISINFECTION OF PREMISES, ETC.

The table shows the number of premises and books dealt with on account of infectious disease :—

Houses, etc., disinfected	...	...	...	2,872
Library and school books disinfected	...	...	...	513

The amount of materials used for these purposes and also issued to the public is shown below :—

Formaldehyde, 40 per cent.	...	...	...	21 gallons
Naphthalene Powder	...	...	...	5½ cwts.
Disinfectant (Crude)	...	...	...	26 gallons
Whiting	...	...	...	200 lbs.
Colour (Dry)	...	...	...	80 lbs.
Brushes Loaned	...	...	...	—

During the year the Section also undertook on behalf of the Food and Dairies Section the stencilling of the “ Approved for Food ” sign on 769 vehicles.

In addition to the above work, 182,709 articles of second-hand clothing were disinfected before export to other countries.

DISINFECTION OF SECOND-HAND CLOTHING.

Export of second-hand clothing to Africa, etc., has virtually ceased and only a few certificates were required for goods going abroad, consisting mostly of private parcels to relatives in East Germany.

There is still a steady demand for certificates of disinfection for clothing being shipped to Eire.

Over all 440 consignments were dealt with during the year, resulting in revenue of £367 12s. 6d., compared with £403 8s. 0d. during the previous year.

APPENDIX.

FACORIES ACT, 1961.

This table is enclosed at the request of the Minister of Labour to indicate to Medical Officers of Health the prescribed particulars required by Section 153(1) of the Factories Act, 1961, to be furnished in their Annual Reports or with respect to matters under Parts I and VIII of that Act administered by the County or Town Council. It is not intended to supersede the fuller statement which is desirable in the text of the Report, but should be attached as an annex.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH
IN RESPECT OF THE YEAR 1966 FOR THE *CITY OF GLASGOW
IN THE COUNTY OF LANARK.

*Prescribed Particulars on the Administration
of the Factories Act, 1961.*

PART I OF THE ACT.

1.—INSPECTIONS for the purposes of provisions as to health (including inspections made by Sanitary Inspectors).

Premises (1)	Number on Register (2)	Number of		
		Inspections (3)	Written notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities†	231	553	14	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	3,149	3,474	276	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority‡ (including out-workers' premises)	167	277	2	—
	<u>3,547</u>	<u>4,304</u>	<u>292</u>	<u>—</u>

2.—Cases in which DEFECTS were found. (If defects are discovered at the premises on two, three or more separate occasions they should be reckoned as two, three or more "cases").

Number of cases in which defects were found

Particulars			Referred		Number of cases in which prosecutions were instituted
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
(1)	(2)	(3)	(4)	(5)	(6)
Want of cleanliness (S.1)	48	47	—	3	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3) ...	8	3	—	1	—
Inadequate ventilation (S.4) ...	—	—	—	—	—
Ineffective drainage of floors (S.6) ...	19	19	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient ...	22	16	—	2	—
(b) Unsuitable or defective ...	496	414	—	21	—
(c) Not separate for sexes ...	105	89	—	—	—
Other offences against the Act (not including offences relating to Out-work) ...	314	271	—	3	—
Total ...	1,012	859	—	30	—

* County or Burgh.

† To prevent any differences between the lists kept respectively by the Local Authorities and H.M. Inspectors of Factories of the numbers of factories in which sections 1, 2, 3, 4 and 6 of the Factories Act, 1961 are enforced by Local Authorities, it is requested that Local Authorities should compare their lists of factories with the lists kept by H.M. Inspectors of Factories.

‡ i.e. Electrical Stations (Section 123(1)), Institutions (Section 124), sites of Building operations and Works of Engineering Construction (Section 127), Slaughterhouses (Section 175) (d) and (e) and Railway Running Sheds (Section 175(2) and (10)).

PART VIII OF THE ACT.

OUTWORK.

(Sections 133 and 134).

Nature of Work	Section 133			Section 134		
	No. of out-workers in August list required by Section 133(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wearing Apparel—						
Making, etc., Cleaning and Washing ...	14	—	—	—	—	—
Household Linen ...	—	—	—	—	—	—
Other ...	—	—	—	—	—	—
Total ...	14	—	—	—	—	—

SECTION XVII

OCCUPATIONAL HEALTH.

The Occupational Health Section is responsible for medical examinations in connection with the recruitment of employees of all Corporation Departments except Fire, Police and Transport, which have their own medical officers. This year for the first time the employees of Glasgow Airport were included.

Medical examinations—Entrance, Sick Pay, Superannuation and Retiral—were carried out as in previous years. Three thousand, seven hundred and eleven persons were examined for the first time and 568 were examined for the second or subsequent occasion. The remainder were 54 retiral examinations and 52 examinations carried out on behalf of other local authorities—making a total of 4,385.

Eight hundred and twenty-five (22·3 per cent.) of 3,711 persons examined for the first time for Entrance, Sick Pay or Superannuation purposes were found to be unfit because of the conditions shown in Table I.

TABLE I.

	Male	Female
Pulmonary Tuberculosis—active, newly discovered ...	—	3
Pulmonary Tuberculosis—active, previously known ...	8	6
Other Radiological Chest Lesions requiring investigation	14	8
Non-Pulmonary Tuberculosis	—	—
Chronic Bronchitis and Bronchiectasis... ..	21	8
Cardiac Disease	21	13
Hypertension	42	79
Varicose Veins	19	17
Hernia	15	1
Peptic Ulcer and Indigestion requiring investigation	12	2
Ear Disease	19	6
Genito-Urinary Disease (Non-Tuberculous)	11	4
Arthritis and Rheumatism	1	1
Organic Nervous Disease	4	2
Mental Illness	6	9
Glycosuria requiring investigation	63	9
Albuminuria requiring investigation	33	19
Skin Disease	1	5
Endocrine Disease	—	5
Obesity	48	125
Pyorrhoea and Dental Caries	96	16
Defective Vision	2	—
Other Conditions	29	22
Total ...	<u>465</u>	<u>360</u>

Five hundred and sixty-eight persons who had been found unfit at previous medical examinations were re-examined and of these 266 (46·6 per cent.) were again found to be unfit. Ninety-six persons in this group were classified as permanently unfit for acceptance into the schemes.

The commonest causes of unfitness in males were dental caries, glycosuria requiring investigation, obesity, hypertension and albuminuria. The commonest cause of unfitness in females was obesity often associated with hypertension.

A considerable number of employees found unfit on account of tuberculosis and other radiological chest lesions, albuminuria, glycosuria and dental caries are likely to be found fit at a later date after investigation and treatment have been carried out.

Chest X-ray examination is carried out at the Department's X-ray Unit when each employee is medically examined for the first time, and also on subsequent occasions if required. Miniature X-ray films are used routinely, but if a suspicious lesion is detected the person concerned is recalled for a large X-ray film to be taken. During the year three new cases of active pulmonary tuberculosis were discovered. A number of other persons are under observation at chest clinics as a result of their X-ray examination.

The Occupational Health Section is also consulted by Corporation Departments for advice on working conditions and on the degree of physical fitness required for certain occupations.

Fifty-four persons were examined with a view to premature retirement on health grounds. A number of these examinations were carried out at the employees' homes. The conditions causing premature retirement are shown in Table II, the commonest conditions again being chronic bronchitis and diseases of the cardio-vascular system.

TABLE II

RETIRAL MEDICAL EXAMINATIONS.

CLINICAL CONDITIONS CAUSING PREMATURE RETIREMENT.

	Male	Female
Chronic Bronchitis	11	1
Cardio-Vascular System :		
(i) Coronary Thrombosis	7	1
(ii) Angina Pectoris	—	3
(iii) Congestive Cardiac Failure	1	—
(iv) Valvular Heart Disease	—	1

SECTION XVIII

WELFARE SERVICES

RESIDENTIAL ACCOMMODATION

During the year the third Senior Occupational Centre was opened at Pollokshields Hall with accommodation for sixty girls, thus easing the transport problem for trainees residing in the South Side of the City. The rewiring and alterations at Frogna, which were undertaken in September, 1965, were completed in June, 1966, and the bed capacity was increased from thirty to thirty-three. The available residential accommodation at 31st December, 1966, was as under :—

		No. of beds
Foresthall, 657 Edgefauld Road ...	(1,159 beds, of which 550 are at the disposal of the Western Regional Hospital Board) ...	609
Crookston, 837 Crookston Road ...	Wards ... 342 Annexe ... 14 Cottages ... 136	492
<i>Small Homes—</i>	<i>Opened on</i>	
Woodburn, 10 Cleveden Gardens ...	16th April, 1948 ... }	41
Extension to Woodburn ...	28th June, 1962 ... }	24
Tayford, 33 Newark Drive ...	24th June, 1950	24
Stoneleigh, 48 Cleveden Drive ...	1st November, 1951	19
Redhills, 42 Sherbrooke Avenue ...	18th March, 1952	20
Woodmailing, 39 Sherbrooke Avenue ...	18th April, 1952 ...	26
Ailsa, 13-15 Turnberry Road ...	9th October, 1952	50
Burnbank, 20-26 Burnbank Terrace ...	22nd April, 1953	39
Scott House, 56 Langside Drive ...	19th May, 1953 ... }	36
Extension to Scott House ...	26th April, 1955 ... }	22
Huntly Lodge, 33-34 Huntly Gardens ...	6th October, 1953	14
Fairfield, 53-55 Sherbrooke Avenue ...	12th January, 1954	36
Macarthur House, 15 St. John's Road ...	1st June, 1954 ...	17
Ravelston, 994 Great Western Road ...	17th October, 1956	40
Roberton, 1 Lancaster Crescent ...	21st May, 1957 ...	38
Merrylee Lodge, 55 Muirsketh Road ...	14th November, 1957	50
Knowehead, 372 Albert Drive ...	12th December, 1957	40
Mainsholm, 2 Kirklee Gardens ...	13th March, 1958	60
Extension to Mainsholm ...	4th June, 1965 ... }	42
Windlaw, 340 Ardencraig Road ...	22nd April, 1958	638
Davislea, 100 Mallaig Road ...	18th October, 1962	
Glenwood Lodge, 160 Castlemilk Drive ...	3rd June, 1965	
<i>Holiday Home—</i>		
Frogna, Southwood, Troon ...	5th September, 1957	33
		1,772

Foresthall.—On 31st December, 1966, there were 429 residents in Foresthall and 484 in the Hospital Wards, a total of 913. Total admissions during the year numbered 1,068, of whom 561 were admitted

to hospital wards and the remaining 507 to residential accommodation. The average age on admission was 66·10 years for men and 70·95 years for women. There were 777 discharges and 399 deaths, the average age at death being 76·41 for men and 78·49 for women. The age groups in residential accommodation in Foresthall were as detailed hereunder :—

			Male	Female	Total
Under 60 years	...	...	56	20	76
60-65 years	...	...	36	15	51
66-70 years	...	...	37	15	52
71-75 years	...	...	43	37	80
76-80 years	...	...	29	49	78
81-85 years	...	...	21	40	61
86-90 years	...	...	9	17	26
91-95 years	...	...	2	3	5
			<u>233</u>	<u>196</u>	<u>429</u>

Of the 76 under 60, the majority were within the category of disabled or handicapped.

During the year 144 persons were transferred from residential accommodation to the hospital section and 100 were discharged from the hospital section to residential accommodation.

During the winter months, the concerts provided by voluntary concert parties and the Foresthall staff concert party were well attended.

Crookston.—The greater proportion of residents in Crookston are of the frail ambulant class, a 24-hour nursing staff being available. There were 131 admissions to the Main Home, many of whom were admitted direct from hospital after treatment, being considered to be unfit to return to their former residence. There were 87 deaths in the Home, 9 less than in 1965, 10 less than in 1964 and 40 less than in 1963. During the year 28 persons were admitted to the Cottages and 8 were discharged. Of the 341 persons resident in the Main Home at the end of the year, 23 were registered blind persons, 14 were confined to wheelchairs and 58 were ambulant only with the aid of Zimmer walking aids.

An analysis of the age grouping of residents in Crookston shows that 68·6 per cent. were between 76 and 90 years of age, 88·6 per cent. were over 71 years of age and 55·4 per cent. were over 81 years of age.

The Cottages continue to provide for those who, although not fit to manage their own home, need the minimum of care.

The increasing number of frail residents is shown by the drop in the use of the amenities provided. Bowlers are few and putting seems less popular. The entertainments are quite well attended but there is some indication that the residents prefer to watch television. The Tea Room, which is open five days a week, is well patronised and it has now become quite a social gathering with someone playing the piano and the residents having a sing-song. During the year work started on the building of an extension which will contain change and rest rooms for non-resident staff, a waiting room, an interviewing room and public toilets for females.

Frognal.—As mentioned earlier, the rewiring and alterations were completed in June and it was possible once more to fit in a holiday for the blind, deaf and dumb and other handicapped persons as well as being able to provide a holiday for some of the residents of Crookston, Foresthall and Small Homes. Local organisations in Troon once more showed great interest in the Home and particular mention must be made of the Troon Rotary Club who, once again, provided concerts and transport to outside entertainments. This interest on the part of the local organisations is greatly appreciated and their kindness and hospitality adds to the pleasure of the holiday makers in the Home.

SMALL HOMES.

The 19 Small Homes in the City were fully occupied during the year. Details of admissions and discharges are shown in Table 1 on page 393. From this table it will be noticed that approximately one-third of the new residents were admitted direct from hospital or convalescent nursing homes, and two-thirds came from their own homes, care of relatives or from lodgings. Of the 222 persons transferred to hospital, 95 were re-admitted. The proportion of those admitted direct from hospital to the Homes provided for the frail ambulant is, of course, higher than the general average, due to the facilities for extra care and a 24-hour nursing service, enabling these Homes to provide for a much frailer type of resident. The installation of lifts in the Homes which have been extended has, however, increased the accommodation for persons who otherwise could only have managed a ground-floor room.

The Department's thanks are again due to Professor Ferguson Anderson, Consultant in Diseases of the Aged in Glasgow and the West of Scotland, and his team of physicians in the hospital Geriatric Units who have been so helpful with emergencies arising among the aged in our Eventide Homes.

WELFARE SERVICES FOR THE HANDICAPPED.

Six domiciliary occupational therapists and two occupational assistants were employed during the year, visiting homebound handicapped persons known to the Department to assess their need for aids to increase their independence and to improve their morale. On their visiting list at the end of the year were 829 persons in the following classifications :—

Rheumatoid arthritis	...	...	...	171
Multiple sclerosis	...	...	...	127
Cerebral vascular accident	...	...	...	109
Osteo-arthritis	...	...	...	62
Amputees	...	...	...	57
Neurological	...	...	...	49
Paraplegics	...	...	...	33
Chest and Heart	...	...	...	21
Muscular dystrophy	...	...	...	19
Poliomyelitis	...	...	...	18
Parkinsonism	...	...	...	16
Spastics	...	...	...	15
Circulatory	...	...	...	9
Blind and Partially-sighted	...	...	...	9
Congenital	...	...	...	2
Neuroses	...	...	...	2
Syringomyelia	...	...	...	1
Tuberculosis	...	...	...	1
Quadriplegia	...	...	...	1
Spondylitis	...	...	...	1
Others	...	...	...	106

This shows an increase of 212 patients over the previous year.

The majority of these patients are given instruction in, and provided with craftwork, while the aids supplied to give greater independence show great variety, ranging from handrails at steps, ramps over steps to enable patients in wheelchairs to get out unaided, pavement crossovers for vehicles, toilet aids and bathroom adaptations and fitments, to items specially designed to meet individual requirements as recommended by the occupational therapist.

The latter items are made for the Department by a severely disabled man who is employed as an assistant to the occupational therapists. In his work he is assisted by mentally handicapped boys employed at the Senior Occupation Centre.

Structural alterations to houses to increase the independence of the handicapped are supplied by the Health and Welfare Department through the Building Department's tradesmen and during the year alterations were carried out in 98 houses at a cost of £2,633—an increase of £1,011 from 1965.

If extensive alterations are required, or if the patient has a progressive disability, rehousing to a more suitable house is considered with the co-operation of the Housing Manager. This can, of course, present difficulties—a house could be listed as a ground-floor house while it might be necessary to negotiate a flight of steps from the main street, and, while the multi-storey flats do have adequate lifts, it is sometimes difficult for a severely handicapped person to negotiate the doors of these lifts. It is encouraging to see how many of the severely handicapped can, with help, take their place in society. One man spent his childhood in a home for handicapped children, then a number of years in residential accommodation provided by the local authority before eventually being admitted to an Orthopaedic Hospital for treatment. This treatment enabled him to walk with aids and he was granted an electrically-propelled vehicle by the Scottish Home and Health Department. Employment was obtained for him and this Department helped him to get suitable lodgings. He has now been housed in a local authority flatlet, has a modern invalid tricycle and is managing very well on his own, getting excellent support from his employers and his church and now leads a very full life.

Outwork has continued as last year with ledger work still being supplied from one of the heavy industries in the Glasgow area, and the sewing machines, looms and knitting machines supplied by the Department to the homebound are constantly in use.

The resettlement clinics in hospitals in the City, where the handicapped person is interviewed by a team composed of a medical practitioner experienced in resettlement of the disabled, a medical social worker and a member of this Department's staff, have provided early ascertainment of problems affecting many of the handicapped. Ascertainment has also been improved by the issue of a circular to the persons attending the Limb Fitting and Appliance Centre at Belvidere Hospital, instructing them how to obtain this Department's services.

The After Care Section continues to follow up the leavers from junior occupation centres and special schools for the handicapped by home visitation. Home visits by this section during the year totalled 3,081, school visits 66, office interviews 179, and at 31st December, 1966, the number on the live register was 1,763. The school visits are of particular value as the After Care Officer can then establish a relationship with the pupil and the parents.

In view of the employment situation in Glasgow it was envisaged that this would be a very difficult year for the special school leavers.

However a survey of the employment situation taken at the end of the year showed that over 75 per cent. of the educationally sub-normal leavers had obtained work. Towards the end of the year the effects of the Selective Employment Tax became evident when a considerable number of males in the older age groups were paid off as redundant.

The majority of the physically handicapped who left school this year were able to work in open employment, but several, who were severely handicapped, have gone forward for residential training and others are in sheltered employment. The evening classes in the ordinary schools for former special school pupils continue to be very helpful for those who wish to improve their reading and writing ability. The voluntary organisations which cater for a wide range of handicaps continue to provide excellent social facilities in their clubs at Laurieston House and the physically handicapped are enabled to lead a fairly full life. The close liaison which is maintained with the voluntary organisations is invaluable in the after care of the handicapped.

The Department's social clubs for handicapped persons still meet three afternoons weekly at Laurieston House. A total of 80 disabled persons attended these clubs during the year and specialised transport was required for most of those attending. Individual handcraft instruction was given to 32 who were fit enough and willing to benefit from our handcraft instructor's guidance. He himself is a registered disabled person and the fact that he has overcome his handicap appears to give great encouragement to others. Members who by inclination or extreme disability do not take any form of tuition play table games or just have a chat. A Senior Welfare Officer is always available to attend to the numerous and varied problems of members and one of our chiropodists gives regular treatment as required.

The club's annual social evening in February in the Occupational Training Centre, South Portland Street, was attended by the full membership and the evening was voted an outstanding success. In June a fairly large proportion of the women members attended the very successful film musical "The Sound of Music" in the Gaumont Cinema. The few men interested, however, declined to attend when they discovered that they were greatly outnumbered by the weaker sex. Picnic outings to Callander were arranged on three successive afternoons in August, using this Department's transport. That these outings were a great success is not surprising when it is realised that many of those participating seldom leave their own house except when attending the social clubs. A highlight of the year was the Christmas shopping expedition to Lewis's stores, Argyle Street, on Wednesday,

7th December. The management of Lewis's agreed to a request to keep their store open in the evening for the benefit of disabled persons at a time when the general public were excluded from the building. Voluntary organisations were brought into the scheme and it was an outstanding success. The Welfare Section staff were there to assist in accompanying handicapped persons to the Store and to help by pushing invalid chairs around the various floors, and the management and the staff of the store were extremely co-operative in every way.

At 31st December, 1966, there were 2,065 registered blind persons ordinarily resident in Glasgow. Of this number 869 were males and 1,196 were females. Of the total register 70 per cent. were over 60 years of age, and of 254 new registrations (103 male, 151 female) 217 (85 per cent.) were over 60 years of age. Indeed, the age group 70-79 accounts for 32 per cent. of all new registrations. Of those working (230), 147 (63 per cent.) were employed in sheltered conditions, principally in the Royal Glasgow Workshops for the Blind, 13 were undergoing training and a further 17 were classified "not trained but trainable".

The 10 Home Teachers have an average case load of 206 blind persons and 23 partially-sighted persons under the age of 65 years. Just under 7,000 visits were paid to the homes of Blind Persons, approximately 250 for the purpose of Braille, Moon or Handcraft lessons. The partially-sighted over 65 years of age are visited by the General Welfare Officers. Only where there is special need, or where a relationship has been established before this age, is the visitation continued by the Home Teacher of the Blind. The Handcraft Class for the Blind is held in Laurieston House each Monday afternoon from October to March, with attendances around 15 to 20. Several crafts are taught, the most popular being basketry, stool seating and link mat making.

There are 10 social clubs in the various parts of the City, 5 being for women and five for men and over 250 blind people attend weekly. Most of the Clubs exchange visits with other blind persons' Clubs and other organisations. During the season also, bulb growing competitions, Christmas parties, theatre outings are arranged and finally the season is finished with a bus run to the coast. During the period from October to June, the Department provided transport to convey deaf-blind people to a social club in Laurieston House. Afternoon tea was provided and several competitions were arranged. The annual outing to Troon was attended by 40 deaf-blind people which included some from the Royal Glasgow Workshops for the Blind. The practice continued

of having three socials each month from November to February, these being held in the Govan, Bridgeton and Central areas. At each hall there is a dance, party and two concerts. A light supper is provided and attendances, including guides, are around 150. Other evening activities are the Chess Club, the Swimming Club and Discussion Groups. Holidays were arranged for a number of blind persons at the Department's Holiday Home at Troon, and through other voluntary agencies. Bowling and skittles are held in the public parks and members from the bowling sections compete in regional and national competitions for the blind. From June to September, the Department arranges outings by bus to parks in and around the City. Two outings take place each month and four buses convey blind people and their guides to and from one of four departure points around the City.

Talking Book Machines continue to be popular among the blind persons and the Department pays the annual rental in most cases. Arrangements are made for the supply of radios from the "Wireless for the Blind Fund" and the provision of transport for the uplifting and returning of radios for repair to the Society for the Blind. Arrangements are also made for the issue of passes which entitle blind persons to travel for half-fare on S.M.T. buses and free on Corporation buses. Certificates of blindness are also issued for the following purposes:—income tax, postal voting, wireless licences and reduced cost of travel on British Railways and certain airlines. Chiropody treatment is given free to blind persons by the Department's chiropodists.

The Department continues to work in close co-operation with the Mission to the Adult Deaf and Dumb for Glasgow and the West of Scotland who have their own club premises at the Royal Institute in West Regent Street and the St. Vincent's After Care Society for the Deaf. These organisations act as agents of the Department dealing with persons suffering from the severe handicap of deafness, the Department contributing towards the cost of the various services. The Mission to the Adult Deaf and Dumb have a Home for Aged Deaf situated in Bearsden and the payments made by Glasgow residents admitted there are supplemented by this Department.

Close liaison exists between the Department and the various Voluntary Organisations who usually limit their activities to one particular handicap and sympathetic consideration is given to the many appeals for financial or other help from these organisations.

The new Senior Occupation Centre, Glencairn, opened in March this year in Pollokshields Burgh Hall, increasing the accommodation

for girls living on the South Side of the City and easing the travelling problems of a number of girls who had previously been attending the Killearn Street Occupation Centre. During the year 102 boys were accommodated at South Portland Street, 55 girls at Killearn Street and 29 girls at Glencairn. Craftwork in all Centres has gone on as usual, being augmented more and more by contract work at Killearn Street and South Portland Street. While this outwork has increased it is satisfactory to note that the Annual Sale of Craftwork held in conjunction with the domiciliary occupational therapists and the Occupational Therapist at Foresthall once more showed an increase on the totals of previous years.

Summer outings were again enjoyed by the trainees, and in the winter months they had outings to cinemas and a visit at Christmas to the Kelvin Hall Circus.

GENERAL WELFARE SERVICES.

During the year the Welfare Section undertook investigations on behalf of the Education Department (679), the Home Help Section (5,132), the City Collector's Department in connection with applications for relief of rates (1,408) and the Child Welfare Section (676). Applications for admission to the Department's Eventide Homes totalled 1,095 and 21 applications for supplementation of payments in Voluntary Homes for the Aged were made. At the request of the Lord Provost reports were prepared on 399 applications for assistance from charitable funds at his disposal. In all, 13,101 applications to the Section were recorded. The number of investigations of applications for hardship grants due to the extension of the Smoke Control Areas in the City again increased.

Students from the Probation Service, the University of Strathclyde, the Glasgow University School of Social Study, the Glasgow School of Occupational Therapy and Health Visitor trainees were seconded to the Welfare Section during the year for part of their practical training.

The Clothing Store continues to supply the needs of residents in the Homes, boarded-out mental defectives and patients and those granted clothing by the Ministry of Social Security as well as meeting the requirements of the Children's Department. The value of clothing issued during 1966 was £102,274.

During 1966 the Department were notified of six properties which had become dangerous and uninhabitable, and two properties where persons had been rendered homeless because of fire. As a result of

these incidents 17 families required temporary accommodation at Foresthall and furniture for 36 households had to be removed from the damaged premises and stored by this Department until alternative accommodation was made available. Once again thanks are due to the other Departments who co-operated during these emergencies, e.g. the Dean of Guild Inspectorate, the Police and Fire Services and the workers who, often at some risk, removed furniture from the damaged buildings.

The three family casework units set up in 1965 in Drumchapel, Castlemilk and Easterhouse continue to function effectively. These provide for intensive and more comprehensive social work among families who appear to be unable to maintain proper standards of home and child care without special assistance. The demand for their services has increased but due to the shortage of suitably qualified social workers it has been found necessary in the interests of effective social work to limit the number of cases dealt with by each worker. During the year two houses were let from the Housing Committee to provide offices for the service. One is at 28 Summerhill Road, Drumchapel, where the service is provided by the Glasgow University Queen Margaret Settlement in association with the University of Glasgow School of Social Study. The Health and Welfare Committee provide for the salaries of three of their social workers. The other is at 19 Glenacre Quadrant, Castlemilk, where the service is provided by the Family Service Units, the whole cost being borne by the Health and Welfare Committee. The third unit in Easterhouse is staffed by the Health and Welfare Department's own social workers and it is hoped in 1967 to have them working from an office in Blairtummock House, Easterhouse.

The Housing Department have been adapting a number of houses for flatlets for aged persons. Application forms for these flatlets are issued by the Housing Management Department, the Women's Royal Voluntary Services and the Health and Welfare Department. The application forms are returned to this Department where the needs of the various applicants are assessed and those considered to have prior needs are submitted to the Housing Committee of the W.R.V.S. for final selection and subsequent approval by the Corporation's Housing Committee. The running of the various houses is undertaken by the Women's Royal Voluntary Services, whose voluntary workers keep in close touch with the Housing Management Department and with the Welfare Officers of this Department.

SMALL HOMES: ADMISSIONS AND DISCHARGES, 1966.

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	Ailsa	Burnbank	Davislea	Fairfield	Glenwood Lodge	Huntly Lodge	Knowehad	Macarthur House	Mainsholm	Merrylee Lodge	Ravelston	Redhills	Roberton	Scott House	Stoneleigh	Tayford	Windlaw	Woodburn	Woodmalling	Total
Admitted from own homes	1	3	8	3	2	1	7	2	3	2	2	—	—	3	1	3	2	—	—	43
Admitted from care of relatives	—	4	6	2	2	2	—	—	5	6	5	—	—	—	2	4	6	2	9	55
Admitted from lodgings/service rooms	2	—	2	—	—	—	—	—	3	—	1	1	1	5	—	1	5	—	1	22
Admitted from Hospital	1	15	10	—	6	2	—	2	5	4	3	2	1	11	1	—	1	6	5	75
Admitted from Convalescent, Nursing or Rest Homes	—	1	1	—	1	—	—	—	—	1	—	—	—	—	1	—	2	—	—	7
Transferred from other Small Homes	—	2	1	1	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	7
Transferred from Frail Ambulant Homes— i.e. Crookston	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Burnbank	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Davislea	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Glenwood Lodge	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Windlaw	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Transferred from Foresthall	3	5	—	2	1	—	1	—	1	1	—	—	3	—	—	2	1	2	—	22
Re-admitted after Hospital Treatment	6	12	6	5	4	5	4	1	8	8	5	1	1	—	4	3	9	7	5	95
Total Admissions	13	42	34	13	17	10	12	5	26	23	16	4	6	19	10	13	26	17	20	326
Discharged to own home or friends	2	2	5	—	—	1	2	1	2	2	5	1	—	—	—	2	3	—	3	31
Discharged to Private Rest Homes	—	—	—	—	—	—	—	—	3	—	—	—	—	—	1	—	—	—	—	4
Transferred to other Small Homes	1	—	1	2	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	6
Transferred to Frail Ambulant Homes— i.e. Crookston	1	—	—	—	—	1	—	3	1	1	—	—	1	—	—	4	—	—	—	12
Burnbank	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	2
Davislea	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Glenwood Lodge	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Windlaw	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	2
Transferred to Foresthall—Hospital or Frail Ambulant Unit	—	2	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	3
Transferred to Hospital	11	35	25	9	14	12	4	1	13	14	14	1	2	11	10	4	20	13	9	222
Died in the Home	—	2	4	—	3	1	1	—	8	2	2	—	—	4	—	—	3	1	—	30
Died while on holiday or outside Home	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Discharges	15	41	35	11	17	15	9	5	29	19	21	2	3	16	12	10	27	15	12	314

TABLE II.

RESIDENTIAL HOMES.

AGE GROUPS AT 31st DECEMBER, 1966.

Homes		65 and under	66/70	71/75	76/80	81/85	86/90	91/95	96/100	Total	Grand Total
Ailsa	M.	—	1	2	2	2	1	—	—	8	22
	F.	—	—	2	3	7	1	1	—	14	
Burnbank	M.	—	—	—	—	—	—	—	—	—	48
	F.	2	5	6	7	13	9	5	1	48	
Davislea	M.	—	2	3	5	5	3	1	—	19	58
	F.	—	2	5	7	18	7	—	—	39	
Fairfield	M.	—	2	2	4	1	—	—	—	9	18
	F.	—	—	2	1	4	2	—	—	9	
Glenwood Lodge	M.	—	—	—	4	3	3	1	—	11	4
	F.	1	2	6	6	5	4	6	—	30	
Huntly Lodge	M.	—	—	3	3	2	—	—	—	8	27
	F.	2	2	2	9	2	2	—	—	19	
Knowehead	M.	—	1	2	6	6	—	1	—	16	32
	F.	2	—	4	2	4	4	—	—	16	
Macarthur House	M.	—	—	—	—	1	1	—	—	2	12
	F.	—	1	1	2	5	—	1	—	10	
Mainsholm	M.	—	—	4	4	6	1	—	—	15	42
	F.	1	2	3	4	11	5	1	—	27	
Merrylee Lodge	M.	—	1	2	3	6	3	—	—	15	4
	F.	2	1	4	2	10	4	2	—	25	
Ravelston	M.	—	1	—	5	2	2	—	—	10	29
	F.	1	2	4	3	8	1	—	—	19	
Redhills	M.	—	—	2	4	—	—	1	—	7	18
	F.	—	—	1	4	5	—	1	—	11	
Roberton	M.	—	—	—	—	—	—	—	—	—	15
	F.	—	2	4	2	4	2	1	—	15	
Scott House	M.	—	—	1	2	3	1	—	—	7	37
	F.	2	3	4	5	10	4	1	1	30	
Stoneleigh	M.	—	—	2	2	—	—	—	—	4	21
	F.	1	1	3	3	5	4	—	—	17	
Tayford	M.	—	—	5	1	2	—	—	—	8	23
	F.	1	1	2	3	3	4	1	—	15	
Windlaw	M.	—	—	—	—	1	3	1	—	5	38
	F.	—	2	9	5	5	9	3	—	33	
Woodburn	M.	—	3	2	3	1	2	—	—	11	38
	F.	1	—	6	8	8	4	—	—	27	
Woodmailing	M.	—	1	1	1	1	2	1	—	7	20
	F.	—	—	4	2	4	3	—	—	13	
Crookston Main Home	M.	5	16	17	33	42	30	7	2	152	341
	F.	8	16	10	44	58	36	13	1	189	
Crookston Cottages	M.	—	—	33	3	2	127	80	22	314	
	F.	3	7	15	6	25	13	—	—	93	
Totals	M.	5	32	51	157	240	300	171	51	1,027	1,027
	F.	27	43	106	88	214	53	15	2	699	
All Homes Percentages of Total		3.11	6.91	15.28	23.36	29.21	16.65	4.96	.48		
					52.57						
					84.50						

SECTION XIX

LEGISLATION.

The following Acts of Parliament, Regulations, etc., applicable to the Health and Welfare Services in Scotland came into operation during the year :—

Housing (Scotland) Act, 1966—

Consolidates certain enactments relating to housing in Scotland with the exception of certain provisions relating to financial matters.

Ministry of Social Security Act, 1966—

Provides for the appointment of a Minister of Social Security and the transfer to him of the functions of the Minister of Pensions and National Insurance and of certain functions of the National Assistance Board ; replaces Part II of the National Assistance Act, 1948, by provisions giving rights to non-contributory benefit.

CIRCULARS, REGULATIONS, ETC., ISSUED IN 1966.

S.I.—Statutory Instrument (the date is that of the coming into operation).

S.D.D.—Scottish Development Department.

S.E.D.—Scottish Education Department.

S.H.H.D.—Scottish Home and Health Department.

H. & W. S.—Health and Welfare Service.

F.I.F.—Scottish Home and Health Department Circulars on Imported Food Regulations.

Accident Prevention—

1. H. & W. S. Memo 16 of 16.5.66. Learn to Swim Week, Scotland, 30th May-4th June, 1966.
2. S.I. 588 of 1.6.66. Consumer Protection. The Oil Heater Regulations, 1966.
3. S.H.H.D. 11 of 7.6.66. Accidents arising from the storage and conveyance of petroleum spirit.
4. H. & W.S. Circular 12 of 23.6.66. The Oil Heater Regulations, 1966.
5. S.E.D. Memo. 39 of 4.8.66. The Hazards of Experimenting with Explosives.
6. S.H.H.D. 23 of 22.11.66. Accidents arising from the storage and conveyance of petroleum spirit.

Alcoholism—

1. H. & W.S. 8 of 18.5.66. Health Services for the Treatment and Rehabilitation of the Alcoholic.

Annual Reports—

1. H. & W.S. Circular 3 of 28.1.66. Annual Reports of Medical Officers of Health and Sanitary Inspectors for 1965.

Atmospheric Pollution—

1. S.I. 714 (S45) of 1.7.66. Clean Air. The Smoke Control Areas (Authorised Fuels) (Scotland) Regulations, 1966.
2. S.I. 715 (S46) of 1.7.66. Clean Air. The Smoke Control Areas (Exempted Fireplaces) (Scotland) Order, 1966.

Cancer—

1. H. & W.S. Circular 17 of 10.10.66. Development of Cervical Cytology Services.

Dental Services—

1. H. & W.S. Memo. 1 of 5.1.66. Refresher Courses for Local Authority Dental Officers.
2. H. & W.S. Memo. 5 of 27.1.66. Report on Scottish Dental Health, March, 1965.
3. H. & W.S. Memo. 27 of 15.7.66. Refresher Courses for Dental Officers.
4. H. & W.S. Memo. 28 of 21.7.66. Refresher Courses for Local Authority Dental Officers.
5. H. & W.S. Memo. 34 of 26.9.66. Refresher Courses for Dental Officers.
6. H. & W.S. Memo. 40 of 29.11.66. Refresher Courses for Dental Officers.
7. S.I. 75 (S6) General Dental Services (Scotland) Amendment Regulations.

Disablement—

1. H. & W.S. 21 of 22.11.66. The Handicapped School Leaver.
2. S.H.H.D. 24 of 24.11.66. Interpreters for the Deaf in Courts of Law.

Finance—

1. S.D.D. Circular 8 of 28.2.66. Local Authority Expenditure on Capital Projects.
2. S.D.D. Circular 34 of 19.8.66. Local Authority Expenditure on Capital Projects.

Foods—

1. Foods Circular 1/1966 of 11.2.66. Food and Drugs (Scotland) Act, 1956. The Cheese (Scotland) Regulations, 1966.
2. Foods Memo. 3 of 8.7.66. Vitamin Tablets, Dried Milk and Requisition Forms.
3. Foods Circular 2 of 22.7.66. "Clean Food" Exhibit.
4. S.H.H.D. Foods Circular 5 of 11.8.66. The Food Hygiene (Scotland) Amdt. Regulations, 1966.
5. S.I. 1206 (S87) of 3.10.66. Food and Drugs. Composition and Labelling. The Salad Cream (Scotland) Regulations, 1966.
6. S.I. 1263 (S96) of 17.10.66. Food and Drugs. Composition and Labelling. The Mineral Hydrocarbons in Food (Scotland) Regulations, 1966.
7. S.H.H.D. Foods 9 of 17.11.66. Food and Drugs (Scotland) Act, 1956. Colouring Matter in Food (Scotland) Regulations, 1966.
8. Addenda (Nos. 33 to 38 inclusive) to D.H.S. Circular No. 67/1958 Food and Drugs (Scotland) Act, 1956. Agricultural (Poisonous Substances) Act, 1952. Chemical Substance used in Agriculture and Food Storage.

Health Education—

1. H. & W.S. Memo. 6 of 31.1.66. "Helping Your Doctor" Campaign.
2. H. & W.S. Memo. 18 of 19.5.66. V.D. Educational Publicity—Poster V.D.03.
3. H. & W.S. Memo. 32 of 23.8.66. Health Education—Film Catalogues.

Health Visiting—

1. H. & W.S. Circular 6 of 21.4.66. Sponsorship of Health Visitor Students.

Health Service—

1. H. & W.S. Circular 1 of 12.1.66. Local Authority Health and Welfare Services. Co-operation with Voluntary Bodies.
2. H. & W.S. 9 of 20.5.66. Medical Certification.
3. H. & W.S. Memo. 40 of 15.12.66. Information about Health Service Operational Research Projects.

Housing—

1. S.D.D. Circular 1 of 10.1.66. Housing (Repairs and Rents) (Scotland) Act, 1954, and Rent Act, 1957. Return of Certificates of Disrepair.
2. S.D.D. Circular 58 of 9.12.66. Period of Severe Restraint. Local Authority Rents.

Infectious Disease—

1. H. & W.S. 4 of 23.3.66. Vaccination against Measles.
2. H. & W.S. Memo. 9 of 28.3.66. Poliomyelitis Vaccination.
3. H. & W.S. Memo. 13 of 5.4.66. Poliomyelitis Vaccination Publicity Campaign.
4. H. & W.S. Memo. 25 of 28.6.66. Poliomyelitis Vaccination.
5. H. & W.S. Memo. 35 of 29.9.66. Poliomyelitis Vaccination.
6. H. & W.S. Memo. 46 of 28.12.66. Poliomyelitis Vaccination.

Maternal and Child Welfare—

1. H. & W.S. Memo. 8 of 17.3.66. Children's Wooden Drop-side Cots.
2. H. & W.S. Circular 10 of 1.6.66. Family Planning.
3. H. & W.S. Memo. 39 of 16.11.66. Maternity Benefits.

Meat Inspection—

1. S.H.H.D. Foods Circular 3.8.66. Meat Inspection.
2. Public Health (Imported Food) (Scotland) Regulations, 1937-1948.

Sixty-five FIF Circulars were issued in 1966. These referred to changes in the official certificates of the various countries from which meat is imported, and to amendment of the list of the approved establishments engaged in the processing of various meat products.

Mental Defect and Disease—

1. H. & W.S. Memo. 3 of 24.1.66. Mental Health (Scotland) Act, 1960. Revised list of approved medical practitioners.
2. H. & W.S. 14 of 14.4.66. Mental Health (Scotland) Act, 1960. Revised list of approved medical practitioners.
3. H. & W.S. 26 of 14.7.66. Mental Health (Scotland) Act, 1960. Revised list of approved medical practitioners.
4. H. & W.S. Memo. 37 of 24.10.66. Mental Health (Scotland) Act, 1960. Revised list of approved medical practitioners.

Midwives—

1. H. & W.S. Memo. 45 of 23.12.66. National Health Service Nurses and Midwives. (a) Revised Salary Scales and Board and Lodgings Charges for Certain Tutorial Staff; (b) Secondment of Qualified Nurses for Midwifery Training.

Milk—

1. S.I. 933 (S 72) of 21.7.66. Food and Drugs (Scotland) Act, 1956. The Skimmed Milk with Non-Milk Fat (Scotland) (Amendment) Regulations.
2. Foods 3 of 3.8.66. Food and Drugs (Scotland) Act, 1956. The Skimmed Milk with Non-Milk Fat (Amendment) Regulations, 1966.
3. D.H.S. Circular 6. Chemical Sterilization of Dairy Equipment. Addenda Nos. 96, 10, 11, 12, 13 and 15 to D.H.S. Circular No. 6.

Noise Control—

1. H. & W.S. 5 of 19.4.66. Noise Control. Course on practical noise control.

Nursing—

1. H. & W.S. 7 of 25.4.66. Refresher Course for Senior Public Health Nursing Administrators.

Poisons—

1. S.H.H.D. of 4.7.66. Pharmacy and Poisons Act, 1933.

Public Health—

1. S.H.H.D. of 31.3.66. The Public Health (Aircraft) (Scotland) Regulations, 1966.
2. S.I. 346 (S 23) of 1.4.66. Public Health (Aircraft) (Scotland) Regulations, 1966.
3. S.I. 1570 (S 122) of 22.12.66. Public Health (Ships) (Scotland) Regulations, 1966.
4. H. & W.S. 23 of 22.12.66. The Public Health (Ships) (Scotland) Regulations, 1966.

Radioactivity—

1. H. & W.S. Circular 16 of 28.9.66. Further Course on Radiation for Sanitary Inspectors.
2. H. & W.S. Circular 22 of 2.12.66. Radiological Hazards to Patients.

School Health Service—

1. S.E.D. Circular 620 of 6.9.66. The School, etc., Building Code, Third Edition, 1960. Amendments to parts of the code.
2. H. & W.S. 15 of 27.9.66. School Health Service.

Social Services—

1. H. & W.S. 11 of 8.6.66. Training for Social Work in Health and Welfare Services.
2. H. & W.S. 13 of 23.8.66. Training for Social Work in Health and Welfare Services.
3. S.H.H.D. Circular 20 of 21.11.66. The Ministry of Social Security Act.
4. H. & W.S. 19 of 7.11.66. Allocation of responsibilities of Welfare Officers.

Statistics—

1. H. & W.S. Circular 18 of 13.10.66. Local Health Authority Statistics.

APPENDIX.

TABLE I.—GLASGOW, 1966.—ESTIMATED POPULATION AS AT 30TH JUNE, IN EACH MUNICIPAL WARD, ACREAGE, AND PERSONS PER ACRE.

MUNICIPAL WARDS	POPULATION				Acreage	Persons per acre (including Inst'tutions and Shipping)
	Without Institutions and Shipping	Institu- tions	Shipping*	Total		
1. Shettleston and Tollcross ...	42,044	179	—	42,223	1,167	36
2. Parkhead ...	15,309	474	—	15,783	819	19
3. Dalmarnock ...	25,531	14	—	25,545	487	52
4. Calton ...	15,640	692	—	16,332	404	39
5. Mile-end ...	23,908	281	—	24,289	443	54
6. Dennistoun ...	21,869	—	—	21,869	689	32
7. Provan ...	81,934	2,241	—	84,175	4,846	17
8. Cowlairs ...	19,485	994	—	20,479	645	30
9. Springburn ...	31,132	1,887	—	33,019	2,118	15
10. Townhead ...	19,933	1,611	—	21,544	301	66
11. Exchange ...	6,891	3,274	4	10,169	507	14
12. Anderston ...	14,348	706	412	15,466	530	27
13. Park ...	15,860	796	—	16,656	317	50
14. Cowcaddens ...	13,167	226	—	13,393	488	27
15. Woodside ...	13,498	354	—	13,852	170	79
16. Ruchill ...	41,954	465	—	42,419	1,962	21
17. North Kelvin	20,144	181	—	20,325	278	72
18. Maryhill ...	23,754	252	—	24,006	2,210	11
19. Kelvinside ...	19,853	1,743	5	21,601	1,160	17
20. Partick (East)	18,018	1,077	—	19,095	351	51
21. Partick (West)	17,989	60	61	18,110	464	39
22. Whiteinch ...	20,686	49	—	20,735	894	23
23. Yoker ...	29,146	303	14	29,468	1,213	24
24. Knightswood	52,656	94	—	52,750	1,614	33
25. Hutchesontown	12,212	—	—	12,212	387	32
26. Gorbals ...	17,187	6	—	17,193	252	68
27. Kingston ...	14,877	—	10	14,887	355	42
28. Kinning Park	19,067	88	466	19,621	402	47
29. Govan ...	21,082	100	—	21,182	489	43
30. Fairfield ...	17,752	1,213	266	19,231	1,351	13
31. Craigton ...	35,064	274	—	35,338	1,566	22
32. Pollokshields	34,832	2,186	—	37,018	3,239	11
33. Camphill ...	18,297	361	—	18,658	481	38
34. Pollokshaws ...	47,454	273	—	47,727	3,223	15
35. Govanhill ...	22,469	211	—	22,680	365	62
36. Langside ...	25,256	752	—	26,008	801	32
37. Cathcart ...	64,551	289	—	64,840	2,737	24
CITY ...	954,849	23,711	1,238	979,798	39,725	24

* as at Census 1961.

TABLE II.—GLASGOW, 1966.—INHABITED AND UNOCCUPIED HOUSES
IN EACH MUNICIPAL WARD AS AT WHITSUNDAY, 1966.

MUNICIPAL WARDS	INHABITED HOUSES				Empty Houses
	1966	1965	Decrease	Increase	
1. Shettleston and Tollcross	13,235	13,072	—	163	142
2. Parkhead	5,556	5,576	20	—	69
3. Dalmarnock	9,902	9,823	—	79	445
4. Calton	5,800	5,948	148	—	269
5. Mile-end	8,747	9,157	410	—	396
6. Dennistoun	8,496	8,204	—	292	143
7. Provan	20,988	20,378	—	610	14
8. Cowlares	7,707	7,737	30	—	211
9. Springburn	9,319	9,469	150	—	257
10. Townhead	7,055	7,733	678	—	607
11. Exchange	2,916	3,094	178	—	169
12. Anderston	5,005	5,504	499	—	419
13. Park	5,641	5,498	—	143	340
14. Cowcaddens	4,230	4,927	697	—	580
15. Woodside	5,046	5,168	122	—	292
16. Ruchill	12,575	12,681	106	—	167
17. North Kelvin	8,149	8,140	—	9	295
18. Maryhill	8,796	8,199	—	597	178
19. Kelvinside	7,983	7,733	—	250	174
20. Partick (East)	7,070	6,955	—	115	248
21. Partick (West)	7,204	7,303	99	—	175
22. Whiteinch	7,381	7,447	66	—	198
23. Yoker	9,855	9,633	—	222	47
24. Knightswood	13,870	13,864	—	6	9
25. Hutchesontown	4,630	4,885	255	—	191
26. Gorbals	5,123	5,636	513	—	299
27. Kingston	4,975	5,343	368	—	383
28. Kinning Park	6,959	6,929	—	30	294
29. Govan	7,152	7,329	177	—	274
30. Fairfield	6,526	6,536	10	—	132
31. Craigton	12,028	11,350	—	678	49
32. Pollokshields	10,214	10,132	—	82	127
33. Camphill	7,779	7,720	—	59	140
34. Pollokshaws	12,895	12,763	—	132	53
35. Govanhill	8,707	8,637	—	70	176
36. Langside	9,236	9,211	—	25	108
37. Cathcart	18,965	18,785	—	180	87
CITY	317,715	318,499	784	—	8,157

These figures (supplied by the City Assessor) include Farmed-out Houses, houses attached to business premises and inhabitant occupiers.

TABLE III.—GLASGOW.—LININGS GRANTED BY DEAN OF GUILD COURT
IN RESPECT OF HOUSES IN YEARS FROM 1919.

Year ending 31st August	NUMBER OF APARTMENTS						TOTAL
	1	2	3	4	5	6	
1919-20 (Annual Average)	—	6	692	246	107	29	1,080
1921-25 (do.)	—	308	638	400	234	51	1,631
1926-30 (do.)	—	350	3,067	1,346	448	90	5,301
1931-35 (do.)	13	349	2,287	1,578	131	23	4,381
1936-39 (do.)	—	—	1,581	2,140	533	24	4,279
1940-43 (do.)	—	—	—	—	—	—	—
1944-48 (do.)	25	23	226	792	145	2	1,213
1949-53 (do.)	90	108	2,402	2,230	288	2	5,120
1954-58 (do.)	128	120	3,287	1,102	189	3	4,829
1959	65	5	1,560	139	21	—	1,790
1960	613	403	2,860	264	43	2	4,185
1961	292	192	1,965	137	26	—	2,612
1962	1,328	905	2,733	745	35	—	5,746
1963	678	2,412	5,161	861	81	2	9,195
1964	729	1,396	2,362	860	150	17	5,514
1965	360	1,567	2,603	456	137	—	5,123
1966	209	930	2,163	88	10	—	3,400

TABLE IV.—ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT
SPRINGBURN PUBLIC PARK.

MONTHS	TEMPERATURE			RAINFALL		SUNSHINE Hours
	Highest Temp. in Shade	Lowest Temp. in Shade	Mean Temp.	No. of Days	Amount Collected in inches	
1966						
January ...	53	19	35.2	11	2.13	26.3
February ...	54	22	37.3	17	4.10	32.3
March ...	56	29	43.2	21	3.06	118.1
April ...	64	26	40.9	16	3.08	97.8
May ...	75	36	50.6	19	3.08	205.1
June ...	71	44	56.5	20	5.75	86.5
July ...	80	46	57.6	15	1.65	201.7
August ...	71	41	55.5	17	4.28	129.7
September ...	64	43	54.3	16	4.11	88.7
October ...	59	31	46.5	19	3.45	75.0
November ...	50	26	39.6	19	3.60	61.8
December ...	51	24	38.1	26	5.37	28.1
1956 ...	78	12	46.7	221	38.19	1,196
1957 ...	82	24	48.3	220	42.05	1,264
1958 ...	82	15	47.2	224	41.51	1,052
1959 ...	80	18	48.9	196	34.21	1,220
1960 ...	79	12	47.7	230	41.32	1,260
1961 ...	76	15	47.4	223	46.26	1,086
1962 ...	76	18	46.1	208	43.35	1,230
1963 ...	78	11	45.6	223	37.62	1,281
1964 ...	72	19	47.1	211	36.94	1,145
1965 ...	74	11	45.3	198	41.52	1,190
1966 ...	80	19	46.3	216	43.66	1,151

TABLE V.—GLASGOW.—BIRTHS AND BIRTH-RATES *per Million* IN EACH WARD FOR THE YEAR 1966 AND NUMBER AND PERCENTAGE OF ILLEGITIMATE BIRTHS

MUNICIPAL WARDS.	Births 1966	Birth- rate 1966	Birth- rate 1965	Illegitimate Births	
				No.	% Total Births.
1. Shettleston and Tollcross ...	732	17,410	19,685	59	8.1
2. Parkhead ...	249	16,265	16,188	22	8.8
3. Dalmarnock ...	891	34,899	33,912	116	13.0
4. Calton ...	449	28,708	29,978	59	13.1
5. Mile-end ...	819	34,256	34,841	67	8.2
6. Dennistoun ...	537	24,555	26,018	42	7.8
7. Provan ...	1,106	13,499	13,630	87	7.9
8. Cowlares ...	548	28,124	31,527	39	7.1
9. Springburn ...	513	16,478	18,225	38	7.4
10. Townhead ...	624	31,305	30,218	67	10.7
11. Exchange ...	133	19,300	22,941	23	17.3
12. Anderston ...	363	25,300	25,928	44	12.1
13. Park ...	332	20,933	23,726	53	16.0
14. Cowcaddens ...	407	30,911	36,458	44	10.8
15. Woodside ...	429	31,782	33,901	54	12.6
16. Ruchill ...	676	16,113	16,131	81	12.0
17. North Kelvin ...	757	37,579	32,436	66	8.7
18. Maryhill ...	573	24,122	24,180	54	9.4
19. Kelvinside ...	280	14,104	15,257	20	7.1
20. Partick (East) ...	362	20,091	21,345	29	8.0
21. Partick (West) ...	478	26,572	25,132	31	6.5
22. Whiteinch ...	404	19,530	23,187	22	5.4
23. Yoker ...	354	12,146	13,748	28	7.9
24. Knightswood ...	709	13,465	13,755	69	9.7
25. Hutchesontown ...	416	34,065	33,390	30	7.2
26. Gorbals ...	410	23,855	28,095	50	12.2
27. Kingston ...	520	34,953	31,814	43	8.3
28. Kinning Park ...	592	31,048	31,136	57	9.6
29. Govan ...	613	29,077	33,118	49	8.0
30. Fairfield ...	454	25,575	23,744	28	6.2
31. Craigton... ...	385	10,980	9,691	26	6.8
32. Pollokshields ...	513	14,728	15,353	36	7.0
33. Camphill ...	332	18,145	17,521	15	4.5
34. Pollokshaws ...	671	14,140	14,383	56	8.3
35. Govanhill ...	691	30,753	30,298	29	4.2
36. Langside ...	378	14,967	16,104	20	5.3
37. Cathcart ...	1,037	16,065	15,569	69	6.7
Institutions ...	29	—	—	27	—
Harbour ...	—	—	—	—	—
CITY ...	19,766	20,174	20,828	1,749	8.8

TABLE VI.—GLASGOW.—DEATHS AND DEATH RATES *per Million* IN EACH MUNICIPAL WARD, FOR THE YEAR 1966, AND CORRESPONDING RATES FOR 1965 AND 1964. (Compiled in the Department).

MUNICIPAL WARDS	Deaths 1966	Death-rates		
		1966	1965	1964
1. Shettleston and Tollcross ...	509	12,106	12,001	11,295
2. Parkhead	237	15,481	15,678	14,786
3. Dalmarnock	361	14,140	14,422	11,622
4. Calton	258	16,496	14,235	15,154
5. Mile-end	305	12,757	13,139	12,074
6. Dennistoun	285	13,032	13,613	13,675
7. Provan	686	8,373	7,449	7,399
8. Cowlairs	286	14,678	14,128	13,991
9. Springburn	360	11,564	10,696	10,195
10. Townhead	268	13,445	13,131	11,854
11. Exchange	150	21,768	19,095	15,733
12. Anderston	203	14,148	15,309	12,650
13. Park	206	12,989	13,496	13,121
14. Cowcaddens	144	10,936	11,806	11,728
15. Woodside	181	13,409	12,626	12,856
16. Ruchill	552	13,157	12,705	11,468
17. North Kelvin	288	14,297	11,698	12,301
18. Maryhill	312	13,135	13,676	13,248
19. Kelvinside	305	15,363	14,036	15,076
20. Partick (East)	234	12,987	13,872	15,159
21. Partick (West)	242	13,453	15,674	13,371
22. Whiteinch	273	13,197	13,899	12,800
23. Yoker	428	14,685	15,445	13,383
24. Knightswood	453	8,603	8,782	8,284
25. Hutchesontown	162	13,266	12,604	11,859
26. Gorbals	169	9,833	14,182	11,342
27. Kingston	194	13,040	13,829	11,716
28. Kinning Park	276	14,475	14,738	13,161
29. Govan	286	13,566	13,534	13,054
30. Fairfield	267	15,041	14,214	14,050
31. Craigton	522	14,887	13,669	12,763
32. Pollokshields	371	10,651	10,216	10,593
33. Camphill	294	16,068	17,145	17,484
34. Pollokshaws	445	9,378	9,701	8,411
35. Govanhill	310	13,797	13,645	12,572
36. Langside	356	14,096	13,668	14,079
37. Cathcart	621	9,620	9,322	8,821
Institutions	642	—	—	—
Harbour	4	—	—	—
CITY	12,445	12,702	12,749	12,047

TABLE VII.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* FROM DIFFERENT CAUSES, FOR THE YEAR 1966, AND THE CORRESPONDING RATES FOR 1965 AND 1964.

(from Registrar General's Annual Returns)

Code No.	CAUSE OF DEATH	Deaths 1966	Annual Death Rate per Million		
			1966	1965	1964
1	Tuberculosis of the Respiratory System	95	97	140	136
2	Tuberculosis, other Forms	13	13	8	9
3	Syphilis and its sequelae	7	7	13	7
4	Dysentery, all forms	1	1	2	2
5	Whooping Cough	—	—	—	—
6	Meningococcal infections	7	7	5	8
7	Acute poliomyelitis	—	—	—	—
8	Measles	3	3	—	3
9	Other infective and parasitic diseases*	21	21	15	25
10/12	Malignant neoplasms	2,487	2,538	2,617	2,464
13	Benign and unspecified neoplasms	25	26	21	22
14	Diabetes Mellitus	131	134	121	71
15	Anaemias	39	40	42	42
16	Other general diseases	69	70	72	73
17	Vascular lesions affecting central nervous system	1,797	1,834	1,982	1,763
18	Non-Meningococcal meningitis	12	12	11	19
19	Other diseases of the nervous system	149	152	183	155
20	Rheumatic fever	2	2	—	2
21	Chronic rheumatic heart disease	149	152	161	172
22	Arteriosclerotic heart disease, including coronary disease	2,581	2,634	2,652	2,612
23	Degenerative heart disease	777	793	793	660
24	Other diseases of heart	160	163	149	123
25	Hypertensive heart disease	183	187	163	173
26	Other hypertensive disease	84	86	85	105
27	Other circulatory disease	353	360	281	316
28	Influenza	72	74	17	16
29	Pneumonia (except of newborn)	652	665	532	420
30	Bronchitis	808	825	813	793
31	Other respiratory disease	64	65	87	81
32	Ulcer of stomach and duodenum	94	96	76	86
33	Appendicitis	15	15	18	10
34	Intestinal obstruction and hernia	71	73	73	71
35	Gastritis, duodenitis, enteritis, and colitis (except diarrhoea of newborn)	68	69	58	55
36	Cirrhosis of liver	54	55	48	47
37	Other diseases of liver	34	35	35	31
38	Other digestive diseases	45	46	50	42
39	Nephritis and nephrosis	54	55	64	72
40	Hyperplasia of prostate	34	35	37	32
41/42	Other diseases of the genito-urinary system	105	107	94	99
43	Deliveries and complications of pregnancy, childbirth and puerperium	3	3	14	7
44	Diseases of skin and organs of locomotion	40	41	48	43
45/47	Congenital malformations	130	133	146	125
48	Birth injuries, postnatal asphyxia and atelectasis	192	196	175	208
49	Infections of the Newborn	32	33	27	23
50	Other diseases peculiar to early infancy and immaturity, unqualified	79	81	99	95
51	Senility without mention of psychosis	36	37	38	32
52	Ill defined and unknown causes	20	20	41	48
53/54	Road vehicle accidents	167	170	174	155
55	Accidents in the home	193	197	255	261
56	Other violence (BE50)	146	149	133	141
57	Suicide and self inflicted injury	88	90	92	98
	Total	12,441	12,697	12,751	12,053

* Including typhoid fever, scarlet fever and streptococcal sore throat, diphtheria and acute infectious encephalitis.

TABLE VIIIA.—GLASGOW, 1966.—DEATHS FROM DIFFERENT CAUSES
AT SEVERAL AGE PERIODS (MALES).

(from Registrar General's Annual Return)

Code No.	CAUSE OF DEATH	—4 Wks	4— Wks	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	85+	Total Males
1	Tuberculosis of the Respiratory system ...	—	—	—	—	—	1	2	4	14	20	17	10	3	71
2	Tuberculosis, other forms ...	—	—	—	—	—	—	—	1	—	1	2	1	—	5
3	Syphilis and its sequelae ...	—	—	—	—	—	—	—	—	1	1	2	2	—	6
4	Dysentery, all forms ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Meningococcal Infections ...	—	4	1	—	—	—	—	—	—	—	—	—	—	5
7	Acute poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Measles ...	—	1	—	1	—	—	—	—	—	—	—	—	—	2
9	Other infective and parasitic diseases* ...	—	2	1	—	—	—	1	—	1	1	3	—	—	9
10/	Malignant Neoplasms ...	—	—	4	4	2	8	16	45	159	462	467	221	40	1,428
13	Benign and unspecified Neoplasms ...	—	—	—	—	—	—	1	1	1	2	6	3	—	14
14	Diabetes Mellitus ...	—	—	—	1	—	1	1	1	4	12	14	5	—	39
15	Anaemias ...	—	—	—	—	—	—	—	—	—	—	5	8	1	14
16	Other general diseases ...	—	—	—	—	—	3	3	2	4	4	2	4	—	22
17	Vascular lesions affecting central nervous system ...	—	—	—	—	—	4	3	7	31	119	210	217	97	688
18	Non-meningococcal meningitis ...	1	—	1	—	—	—	1	—	—	2	—	—	—	5
19	Other diseases of the Nervous system ...	—	—	1	2	1	2	5	6	7	17	16	8	1	66
20	Rheumatic fever ...	—	—	—	—	—	—	—	—	1	—	—	—	—	1
21	Chronic rheumatic heart disease ...	—	—	—	—	—	—	7	5	8	17	9	7	—	53
22	Arteriosclerotic heart disease including coronary disease ...	—	—	—	—	—	1	4	53	218	489	453	265	58	1,541
23	Degenerative heart disease ...	—	—	—	—	—	3	2	1	12	29	72	113	56	288
24	Other diseases of heart ...	—	1	—	—	—	—	1	2	3	5	21	14	6	53
25	Hypertensive heart disease ...	—	—	—	—	—	—	—	1	5	15	23	16	7	67
26	Other hypertensive disease ...	—	—	—	—	—	—	1	4	5	9	9	10	3	41
27	Other circulatory diseases ...	—	—	—	—	—	—	—	1	8	20	51	54	30	164
28	Influenza ...	—	1	—	—	—	2	—	—	1	7	13	10	5	39
29	Pneumonia (except of the Newborn) ...	—	48	10	—	1	1	1	3	20	41	72	96	39	332
30	Bronchitis ...	—	7	2	—	—	2	—	5	34	168	202	117	37	574
31	Other respiratory diseases ...	—	—	—	—	—	—	1	2	3	2	19	12	2	41
32	Ulcer of stomach and duodenum ...	1	—	1	—	—	—	1	2	2	20	20	18	4	69
33	Appendicitis ...	—	—	—	—	—	1	—	—	1	1	4	—	—	7
34	Intestinal obstruction and hernia ...	1	2	—	—	—	1	—	2	5	5	8	7	4	35
35	Gastritis, duodenitis, enteritis and colitis (except diarrhoea of Newborn) ...	—	10	2	—	—	1	—	—	3	3	8	2	—	29
36	Cirrhosis of the liver ...	—	—	—	—	—	—	—	2	7	13	4	2	—	28
37	Other diseases of the liver ...	—	—	—	—	—	—	—	—	1	4	2	2	1	10
38	Other digestive diseases ...	—	—	1	1	—	—	—	1	3	6	8	2	2	24
39	Nephritis and Nephrosis ...	—	—	—	2	—	1	1	5	6	3	4	6	—	28
40	Hyperplasia of the Prostate ...	—	—	—	—	—	—	—	—	1	2	4	17	10	34
41/	Other diseases of the genito-urinary system ...	2	1	—	—	—	—	1	2	5	11	9	14	1	46
42	Deliveries and complications of Pregnancy, Childbirth and Puerperium ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
43	Diseases of the skin and organs of locomotion ...	—	—	—	—	—	—	1	—	—	5	1	3	2	12
45/	Congenital Malformations ...	33	20	5	—	1	2	—	1	1	1	—	1	—	65
47	Birth injuries, post-natal asphyxia and atelectasis ...	115	1	—	—	—	—	—	—	—	—	—	—	—	116
48	Infections of the Newborn ...	21	1	—	—	—	—	—	—	—	—	—	—	—	22
49	Other diseases peculiar to early infancy and immaturity unqualified ...	41	2	—	—	—	—	—	—	—	—	—	—	—	43
50	Senility without mention of psychosis ...	—	3	—	—	—	—	—	—	—	—	1	6	—	13
51	Ill defined and unknown causes ...	1	—	—	—	—	—	—	—	—	2	3	1	—	10
52/	Road vehicle accidents ...	—	—	8	6	4	13	13	22	10	19	7	7	—	109
54	Accidents in the home ...	2	10	7	4	1	2	7	10	15	11	16	9	11	105
55	Other violence (BE50) ...	2	1	4	8	2	19	19	11	20	23	4	6	3	122
56	Suicide and self-inflicted injury ...	—	—	—	—	—	3	7	11	10	14	6	1	1	53
57	All causes ...	220	115	48	29	12	71	100	213	630	1,586	1,797	1,297	430	6,548

* Including typhoid fever, scarlet fever and streptococcal sore throat, diphtheria and acute infectious encephalitis.

TABLE VIIIb.—GLASGOW, 1966.—DEATHS FROM DIFFERENT CAUSES
AT SEVERAL AGE PERIODS (FEMALES).

(from Registrar General's Annual Return)

Code No.	CAUSE OF DEATH	—4 Wks	4— Wks	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	85+	Total 1'ms	Total Both Sexes
1	Tuberculosis of the Respiratory system ...	—	—	—	—	—	—	3	7	5	5	3	1	—	24	95
2	Tuberculosis, other forms ...	—	—	—	1	—	—	1	1	—	1	1	3	—	8	6
3	Syphilis and its sequelae ...	—	—	—	—	—	—	—	—	—	—	1	—	—	1	7
4	Dysentery, all forms ...	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
5	Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Meningococcal Infections ...	—	1	—	1	—	—	—	—	—	—	—	—	—	2	7
7	Acute poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Measles ...	—	—	1	—	—	—	—	—	—	—	—	—	—	1	3
9	Other infective and parasitic diseases* ...	—	4	—	—	1	1	1	—	—	2	2	1	—	12	21
10/																
12	Malignant Neoplasms ...	—	2	1	3	1	8	7	51	140	231	329	234	52	1,059	2,467
13	Benign and unspecified Neoplasms ...	—	2	—	1	—	—	—	—	—	2	5	1	—	11	25
14	Diabetes Mellitus ...	—	—	1	—	—	2	—	—	1	17	38	28	5	92	131
15	Anaemias ...	—	—	—	—	—	—	—	1	—	2	7	14	1	25	39
16	Other general diseases ...	1	3	—	1	1	3	4	1	2	8	13	9	1	47	6
17	Vascular lesions affecting central nervous system ...	—	—	1	—	1	2	5	11	56	125	325	397	186	1,099	1,797
18	Non-meningococcal meningitis ...	—	3	—	—	—	—	—	—	—	2	—	2	—	7	12
19	Other diseases of the Nervous system ...	—	—	2	4	—	5	4	1	16	10	19	20	2	83	149
20	Rheumatic fever ...	—	—	—	—	—	—	1	—	—	—	—	—	—	1	2
21	Chronic rheumatic heart disease ...	—	—	—	—	—	—	3	11	30	25	17	10	—	96	149
22	Arteriosclerotic heart disease including coronary disease ...	—	—	—	—	—	—	—	9	46	203	358	315	109	1,040	2,581
23	Degenerative heart disease ...	—	—	—	—	—	—	1	1	9	28	116	190	144	489	777
24	Other diseases of heart ...	—	—	1	—	—	—	2	—	9	10	24	37	23	167	16
25	Hypertensive heart disease ...	—	—	—	—	—	—	—	—	2	12	36	52	14	116	183
26	Other hypertensive disease ...	—	—	—	—	—	—	—	2	3	5	17	10	6	43	84
27	Other circulatory disease ...	—	—	—	—	—	—	1	1	7	11	42	73	54	189	353
28	Influenza ...	—	—	—	—	—	—	3	1	2	3	8	10	6	33	72
29	Pneumonia (except of the Newborn) ...	—	39	6	2	—	1	4	3	7	24	64	107	63	320	652
30	Bronchitis ...	—	6	4	—	1	—	1	7	22	38	67	66	22	234	808
31	Other respiratory diseases ...	—	—	—	—	—	—	1	1	2	4	8	5	2	23	64
32	Ulcer of stomach and duodenum ...	—	—	—	—	—	—	—	—	5	4	7	7	2	25	94
33	Appendicitis ...	—	—	—	—	—	—	1	1	—	2	1	2	1	8	15
34	Intestinal obstruction and hernia ...	3	—	—	—	—	—	—	—	—	3	9	20	1	36	71
35	Gastritis, duodenitis, enteritis and colitis (except diarrhoea of the Newborn) ...	—	10	3	—	—	—	—	2	3	4	4	10	3	39	68
36	Cirrhosis of the liver ...	—	—	—	—	—	—	—	—	3	7	12	3	1	26	54
37	Other diseases of the liver ...	—	—	—	—	—	—	—	—	3	6	8	4	3	24	34
38	Other digestive diseases ...	1	—	—	1	—	—	—	—	1	1	10	5	2	21	45
39	Nephritis and Nephrosis ...	—	1	—	—	2	2	—	1	1	5	6	6	2	26	54
40	Hyperplasia of the Prostate ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34
41/																
42	Other diseases of the genito-urinary system ...	1	—	—	1	2	—	2	3	7	13	15	11	4	59	105
43	Deliveries and complications of Pregnancy, Childbirth and Puerperium ...	—	—	—	—	—	—	—	3	—	—	—	—	—	3	3
44	Diseases of the skin and organs of locomotion ...	—	1	—	—	—	—	—	—	2	6	13	5	1	28	40
45/																
47	Congenital Malformations ...	28	24	2	—	1	3	1	2	3	1	—	—	—	65	130
48	Birth injuries, post-natal asphyxia and atelectasis ...	75	1	—	—	—	—	—	—	—	—	—	—	—	76	192
49	Infections of the Newborn ...	10	—	—	—	—	—	—	—	—	—	—	—	—	10	32
50	Other diseases peculiar to early infancy and immaturity unqualified ...	33	3	—	—	—	—	—	—	—	—	—	—	—	36	79
51	Senility without mention of psychosis ...	—	—	—	—	—	—	—	—	—	—	—	7	16	23	36
52	Ill defined and unknown causes ...	—	2	—	—	—	—	—	1	—	1	4	1	1	10	20
53/																
54	Road vehicle accidents ...	—	—	6	3	2	10	—	5	4	7	12	8	1	58	167
55	Accidents in the home ...	—	8	3	2	1	2	1	5	7	11	15	19	14	88	193
56	Other violence (BE50) ...	1	—	1	1	1	—	—	1	3	3	2	6	5	24	146
57	Suicide and self-inflicted injury ...	—	—	—	—	—	3	7	5	6	8	4	1	1	35	88
	All causes ...	153	110	32	21	15	42	54	138	407	850	1,622	1,701	748	5,893	12,44

* Including typhoid fever, scarlet fever and streptococcal sore throat, diphtheria and acute infectious encephalitis.

TABLE IX.—GLASGOW.—STILLBIRTHS, DEATHS UNDER 1 YEAR AND DEATH-RATES PER 1,000 BIRTHS IN EACH MUNICIPAL WARD, FOR THE YEARS 1966 AND 1965

MUNICIPAL WARDS	Still- births 1966	Rate per 1,000 Births* 1966	Rate per 1,000 Births* 1965	Deaths —1 year 1966	Death Rate per 1,000 Births† 1966	Death Rate per 1,000 Births† 1965
1. Shettleston and Tollcross ...	20	27	24	36	49	29
2. Parkhead ...	9	35	31	7	28	20
3. Dalmarnock ...	25	27	17	35	39	35
4. Calton ...	9	20	20	12	27	38
5. Mile-end ...	15	18	22	38	46	21
6. Dennistoun ...	7	13	20	11	20	22
7. Provan ...	30	26	33	35	32	29
8. Cowlairs ...	14	25	20	14	26	22
9. Springburn ...	10	19	15	11	21	21
10. Townhead ...	9	14	18	21	34	24
11. Exchange ...	2	15	17	6	45	52
12. Anderston ...	5	14	22	7	19	35
13. Park ...	7	21	20	7	21	26
14. Cowcaddens ...	6	15	30	11	27	32
15. Woodside ...	10	23	8	17	40	25
16. Ruchill ...	4	6	14	22	33	36
17. North Kelvin ...	14	18	16	18	24	19
18. Maryhill ...	19	32	21	28	49	28
19. Kelvinside ...	6	21	13	8	29	10
20. Partick (East)	3	8	17	4	11	23
21. Partick (West)	9	18	11	12	25	26
22. Whiteinch ...	4	10	12	2	50	21
23. Yoker ...	6	17	20	10	28	49
24. Knightswood ...	15	21	18	21	30	22
25. Hutchesontown	11	26	17	14	34	29
26. Gorbals ...	7	17	24	14	34	44
27. Kingston ...	12	23	30	23	44	43
28. Kinning Park	10	17	21	19	32	47
29. Govan ...	12	19	33	17	28	27
30. Fairfield ...	8	17	22	16	35	27
31. Craigton ...	6	15	17	10	26	20
32. Pollokshields ...	7	13	9	15	29	26
33. Camphill ...	3	9	21	8	24	15
34. Pollokshaws ...	20	29	20	20	30	37
35. Govanhill ...	17	24	27	23	33	24
36. Langside ...	5	13	10	4	11	12
37. Cathcart ...	21	20	17	22	21	20
Institutions ...	—	—	—	—	—	—
Harbour ...	—	—	—	—	—	—
CITY ...	397	20	20	598	30	28

* Live and Stillbirths.

† Live Births.

TABLE X.—GLASGOW INFANT DEATHS, 1966.
(from the Registrar General's Annual Return).

Abbreviated List B.		Males			Females			Both sexes — 1 year
		— 4 wks.	4 wks. +	Total	— 4 wks.	4 wks. +	Total	
	<i>Congenital Malformations—</i>							
41	—of nervous system and sense organs	7	5	12	14	10	24	36
41.1	—of circulatory system ...	16	9	25	6	12	18	43
41.2	other congenital malformations ...	10	6	16	8	2	10	26
	<i>Diseases of Early Infancy—</i>							
42	Birth Injuries, Post-natal Asphyxia and Atelectasis ...	115	1	116	75	1	76	192
43	Infections of the Newborn ...	21	1	22	10	—	10	32
44	Other diseases peculiar to early infancy and immaturity unqualified ...	41	2	43	33	3	36	79
	<i>Diseases of the Respiratory System—</i>							
30	Influenza ...	—	1	1	—	—	—	1
31	Pneumonia ...	—	48	48	—	39	39	87
32	Bronchitis ...	—	7	7	—	6	6	13
41.3	Other respiratory disease ...	—	—	—	—	—	—	—
	<i>Diseases of the Digestive System—</i>							
35	Intestinal Obstruction and Hernia ...	1	2	3	3	—	3	6
36	Gastritis, duodenitis, enteritis and colitis (except diarrhoea of Newborn)	—	10	10	—	10	10	20
46.5	Other Digestive Disease ...	—	—	—	1	—	1	1
	<i>Diseases of the Nervous System—</i>							
22	Vascular Lesions affecting the Nervous System ...	—	—	—	—	—	—	—
23	Non-meningococcal Meningitis ...	1	—	1	—	3	3	4
46.1	Other Diseases of the Nervous System	—	—	—	—	—	—	—
1	<i>Tuberculosis—Respiratory</i> ...	—	—	—	—	—	—	—
2	Non-respiratory ...	—	—	—	—	—	—	—
	<i>Infectious Disease—</i>							
6	Dysentery ...	—	—	—	—	—	—	—
9	Whooping Cough ...	—	—	—	—	—	—	—
10	Meningococcal Infections ...	—	4	4	—	1	1	5
12	Poliomyelitis ...	—	—	—	—	—	—	—
14	Measles ...	—	1	1	—	—	—	1
17	Other infective or parasitic ...	—	2	2	—	4	4	6
	<i>Violence—</i>							
48.1	Accidents in the Home ...	2	10	12	—	8	8	20
	Other Violent Causes ...	2	1	3	1	—	1	4
	<i>All Other Causes</i> ...	4	5	9	2	11	13	22
	Totals ...	220	115	335	153	110	263	598

TABLE XI.—GLASGOW, 1964-1966—ABSTRACT OF NOTIFICATIONS UNDER NOTIFICATION OF BIRTHS ACT, 1907.

	1966	1965	1964
Total Number of Notifications	20,430	21,327	23,083
Doctor at Home	2,758	3,436	4,860
Doctor in Nursing Home	167	199	314
Doctor in Institution	17,072	17,259	17,413
Maternity Hospital (Outdoor) Nurse	—	—	—
Midwife in Nursing Home	287	304	369
Certified Midwife	—	—	—
Municipal Midwife	138	127	118
Others	8	2	9

TABLE XII.—GLASGOW, 1964-1966—BIRTHS NOTIFIED SHOWING MEDICALLY AND NOT MEDICALLY ATTENDED.

	1966	1965	1964
Notifications Received— <i>less Duplicates</i> —			
Total	20,430	21,327	23,083
Live-births	20,041	20,932	22,654
Still-births	389	395	429
Per cent. Still-births to Total	1·9	1·9	1·8
Medically attended—			
Births at Home	2,758	3,436	4,860
Births in Nursing Home	167	199	314
In Institutions	17,072	17,259	17,413
Total	19,997	20,894	22,587
Per cent.	98	98	98
Still-births at Home	34	24	48
Still-births in Nursing Home	6	—	—
Still-births in Institutions	344	369	376
Not Medically attended—			
Maternity Hospital, Outdoor Nurse	—	—	—
Certified Midwives in Nursing Home	287	304	369
Certified Midwives in Private Practice	—	—	—
Municipal Midwives	138	127	118
Others	8	2	9
Total	433	433	496
Per cent.	2	2	2
Still-births	5	2	5

TABLE XIII.—GLASGOW, 1966 and 1965.—CASES OF INFECTIOUS DISEASE REGISTERED AND NUMBERS OF THESE TREATED IN FEVER HOSPITALS, &c.

	1966				1965			
	Fever Hosp.	Other Institutions	Home	Total	Fever Hosp.	Other Institutions	Home	Total
<i>A. Notifiable—</i>								
Anthrax	—	1	—	1	2	—	—	2
Cerebrospinal Fever ...	21	6	1	28	28	8	2	38
Continued Fever ...	16	2	—	18	20	1	2	23
Diphtheria	—	—	—	—	—	—	—	—
Dysentery	760	80	942	1,782	1,045	64	995	2,104
Encephalitis Lethargica	—	—	—	—	—	—	—	—
Erysipelas	14	1	11	26	19	—	10	29
Food Poisoning	59	1	100	160	43	6	163	212
Infective Jaundice* ...	—	—	—	—	—	1	—	1
Leprosy	—	—	—	—	—	—	—	—
Malaria	4	—	—	4	4	—	—	4
Ophthalmia Neonatorum	19	—	2	21	9	2	5	16
Pneumonia—								
Acute Influenzal ...	3	3	17	23	1	3	1	5
Acute Primary ...	1,378	620	237	2,235	1,391	497	233	2,121
Polio-Encephalitis, Acute	—	—	—	—	—	—	—	—
Poliomyelitis—								
Paralytic	—	—	—	—	—	—	—	—
Non-paralytic	—	—	—	—	—	—	—	—
Puerperal Fever† ...	1	110	—	111	—	132	6	138
Puerperal Pyrexia† ...	—	109	2	111	—	60	5	65
Scarlet Fever	35	1	139	175	52	3	185	240
Smallpox	—	—	—	—	—	—	—	—
Trachoma	1	—	2	3	—	—	2	2
Tuberculosis—								
Pulmonary	411	—	223	634	456	—	265	721
Other forms	49	—	53	102	34	—	70	104
Typhoid Fever (and Paratyphoid B) ...	3	—	4	7	39	—	2	41
Whooping Cough ...	163	—	713	876	76	—	383	459
<i>B. Not Notifiable—</i>								
Chickenpox	50	2	941	993	98	2	2,331	2,431
Gastro-enteritis	231	103	58	392	281	77	44	402
German Measles	4	2	19	25	7	—	28	35
Measles	240	2	1,758	2,000	178	5	1,149	1,332
Others	103	1	73	177	87	1	67	155
	3,565	1,044	5,295	9,904	3,870	862	5,948	10,680
Notified but diagnosis altered to Non Infectious Disease	‡1,689	—	—	1,689	1,984	—	—	1,984
	5,254	1,044	5,295	11,593	5,854	862	5,948	12,664

Where patients suffer from two or more diseases, each disease is reckoned as a case.

Apart from cases of pneumonia admitted to General Hospitals and other Institutions in times of pressure; cases of puerperal fever, puerperal pyrexia, and ophthalmia neonatorum occurring in other than Fever Hospitals and allowed to remain; and cases of trachoma treated in Stobhill Hospital; the cases shown under the headings "Other Institutions" are for the most part, accidental.

* Weil's Disease.

† Includes cases treated in Robroyston Hospital.

‡ Includes 2 Typhoid Carriers.

TABLE XIV.—CASES OF INFECTIOUS DISEASE REGISTERED IN EACH MONTH IN 1966.

	MONTH												YEAR	
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Hosp.	Home
Enteric, including Paratyphoid Fever	—	2	1	—	1	1	—	1	—	—	—	1	3	4
Continued and Undefined Fever ...	2	1	1	1	1	4	1	3	2	—	1	—	18	—
Puerperal Fever ...	7	15	13	7	9	5	15	10	14	8	3	5	111	—
Puerperal Pyrexia ...	2	5	7	9	10	14	1	18	16	13	7	9	109	2
Smallpox ...	—	—	—	—	22	17	11	—	13	12	18	19	36	139
Scarlet Fever ...	18	12	18	9	—	—	—	6	—	—	—	—	—	—
Diphtheria and Membranous Croup	—	—	—	—	5	2	2	1	—	1	4	1	15	11
Erysipelas ...	2	2	3	3	2	2	2	—	—	1	4	2	27	1
Cerebro-spinal Fever ...	4	6	5	—	1	1	—	3	3	—	3	8	19	2
Ophthalmia Neonatorum ...	1	—	1	—	—	—	—	—	1	—	1	—	1	2
Trachoma ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute and Chronic Encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lethargia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis (Paralytic) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis (Non-paralytic)	254	322	210	123	139	131	141	126	134	240	212	203	1,998	237
Acute Primary Pneumonia ...	5	9	4	1	1	1	—	1	—	—	—	2	6	17
Acute Influenzal Pneumonia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria ...	151	86	114	86	125	146	89	153	175	176	278	203	840	942
Dysentery ...	59	50	61	55	64	52	47	63	39	56	53	35	411	223
Pulmonary Tuberculosis ...	5	5	8	11	11	11	8	15	3	11	9	5	49	53
Other Forms of Tuberculosis ...	21	10	58	39	78	74	29	23	189	389	648	442	242	1,758
Measles ...	—	1	1	—	7	2	—	—	1	5	4	4	6	19
German Measles ...	39	20	38	30	29	73	25	74	164	159	151	74	163	713
Whooping Cough ...	107	57	136	62	175	154	7	12	54	93	74	62	52	941
Chickenpox ...	4	7	16	7	12	24	18	20	13	9	19	11	60	100
Food Poisoning ...	21	17	15	25	41	31	42	45	42	39	43	31	334	58
Gastro Enteritis ...	702	627	711	468	733	745	439	574	865	1,212	1,532	1,118	9,726	—
Total ...	430	419	370	263	349	336	327	396	334	441	420	419	4,504	—
Hospital ...	272	208	341	205	384	409	112	178	531	771	1,112	699	—	5,222
Home ...	...	...	...	...	...	...	...	...	...	...	...	...	105	73
...	...	...	...	...	...	...	...	...	...	...	...	...	1,689	—
...	...	...	...	...	...	...	...	...	...	...	...	...	6,298	5,295

* { Mumps, 27; Infective Hepatitis, 149.
 Anthrax, 1; Laryngeal Croup, 1; † Typhoid Carrier, 2.

TABLE XV.
OPERATIONS OF SANITARY SECTION, 1966.

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1966	City 1965
1. General							
Nuisances and defects removed or remedied	14,275	17,441	12,232	6,622	10,974	61,544	58,683
Consisting of—							
Apartments, Lobbies, or W.C.'s, with insufficient light or ventilation, or otherwise defective in construction	—	—	—	—	—	—	—
Defective Chimneys causing nuisance	18	36	10	11	25	100	112
Disrepair or dampness in Dwelling-houses	2,196	2,746	1,035	583	1,418	7,978	6,058
Offensive smells from Drains, or other reasonable grounds—smoke test	—	—	—	—	—	—	3
Drains, Conductors, Soil-pipes, or Pipes choked or defective ...	5,646	6,829	6,969	2,912	4,572	26,928	27,215
Sanitary Fittings choked or defective	477	978	717	423	420	3,015	2,721
Dirty Houses and Bedding ...	12	22	772	—	7	813	175
Dirty Closes, Stairs, etc. (daily and bi-weekly cleaning) ...	424	459	58	—	217	1,158	862
Common passages, stairs or staircases not in a cleanly state (limewashing or painting) ...	841	616	510	124	634	2,725	2,977
Animals or Poultry kept so as to be a nuisance	3	3	—	—	—	6	11
Accumulation of Garbage or Rubbish	717	513	116	113	140	1,599	1,193
Noise Nuisances—Number dealt with	17	—	7	3	4	31	27
Samples of Water etc., for analysis	132	676	47	130	86	1,071	1,034
Other Irregularities	482	2,528	20	—	2,506	5,536	3,461
Reports to Master of Works ...	2,183	902	992	138	897	5,112	4,709
" Superintendent of Cleansing ...	394	68	77	16	7	562	4,956
" Water Engineer ...	982	1,065	956	288	131	3,422	3,219
Prosecutions—Sheriff Court ...	177	24	8	9	11	229	194
" Police Court ...	—	23	—	—	2	25	9
Number Successful	102	32	7	9	11	161	124
2. Drain Testing.							
Number of Applications (Dean of Guild)	490	745	773	2,977	443	5,428	4,000
Number of Tests to old tennent drains	—	3	—	—	—	3	10
Number of Consultations re drainage scheme	972	147	282	324	340	2,065	2,660

TABLE XV—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1966	1965
3. Common Lodging Houses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	3	1	2	—	—	6	8
With accommodation for ...	671	280	467	—	—	1,418	1,487
Number of irregularities ...	2	1	7	—	—	10	39
Number of prosecutions ...	—	—	—	—	—	—	—
4. Boarding Houses for Emigrants and Seamen.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	1	—	—	—	—	1	1
With accommodation for ...	72	—	—	—	—	72	50
Number of irregularities ...	—	—	—	—	—	—	—
Number of prosecutions ...	—	—	—	—	—	—	—
5. Farmed-out Houses and Houses Let-in-Lodgings.							
Number measured and registered	—	2	8	—	2	12	43
Total number now on register ...	—	8	24	8	2	42	31
Number of irregularities ...	—	12	—	—	—	12	—
Number of prosecutions ...	—	—	—	—	—	—	—
6. Caravan Sites.							
Number of Sites licensed during the year	—	—	—	—	—	—	—
Number on Register	—	7	9	3	—	19	19
Number of Vans accommodated	—	135	137	7	—	279	270
Number of irregularities found ...	—	3	18	4	—	25	20
Number of prosecutions	—	—	—	—	—	—	—
7. Rodent Control.							
Number of Premises infested ...	1,172	1,437	760	830	550	4,749	4,275
Number of Premises Proofed ...	320	128	49	83	126	706	253

TABLE XV—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1966 1965	
8. Mech. Bakehouses.							
Number measured and registered	—	1	2	—	1	4	1
Total number now on register ...	28	36	34	47	20	165	176
Number dirty	—	1	—	1	—	2	7
Number with sanitary conven- ience defective in light or ven- tilation	—	—	4	—	—	4	2
Number with sanitary convenience required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	—	—	4	—	—	4	3
Number of other nuisances ...	—	7	14	—	3	24	14
Number of prosecutions	—	—	—	—	—	—	—
9. Non. Mech. Bakehouses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	—	2	—	11	—	13	13
Number dirty	—	—	—	—	—	—	—
Number overcrowded	—	—	—	—	—	—	—
Number with sanitary conven- ience defective in light or ven- tilation	—	—	—	—	—	—	—
Number with sanitary conveniences required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	—	—	—	—	—	—	—
Number of other nuisances ...	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—
10. Mech. Factories.							
Number registered	40	18	25	—	23	106	108
Total number now on register ...	1,136	429	591	425	449	3,030	3,166
Number dirty	114	13	19	1	18	165	184
Number with sanitary conven- iences defective in light or ven- tilation	100	13	7	1	13	134	167
Number with sanitary fittings choked or defective	91	15	5	1	16	128	162
Number of prosecutions	—	—	—	—	—	—	—
Number of other nuisances ...	214	67	38	4	39	362	328

TABLE XV—Continued.
OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1966 1965	
11. Non-Mech. Factories.							
Number registered	2	—	—	—	—	2	2
Total number now on register ...	56	8	58	60	36	218	263
Number dirty	6	—	—	—	3	9	10
Number overcrowded	—	—	—	—	—	—	—
Number with sanitary conven- iences defective in light or ven- tilation	1	—	1	—	—	2	5
Number with sanitary fittings choked or defective	—	—	—	—	—	—	3
Number of other nuisances	9	1	2	—	2	14	20
Number of prosecutions	—	—	—	—	—	—	—
14. Offices, Shops and Railway Premises.							
Number now on register— ...	6,001	1,575	1,824	1,974	1,548	12,922	12,051
(a) Offices	3,341	280	409	426	338	4,794	4,599
(b) Shops (retail)	1,807	1,014	1,112	1,299	952	6,184	5,649
(c) Wholesale Department or Warehouse	463	63	100	69	69	764	706
(d) Catering Establishment ...	380	208	200	180	185	1,153	1,074
(e) Staff Canteen	7	6	1	—	2	16	13
(f) Fuel Storage Depot	3	4	2	—	2	11	10
Number of General Inspections ...	343	587	616	1,444	1,216	4,206	2,975
Number of other visits	5,735	1,682	907	1,817	1,818	11,959	5,355
15. Homeworkers' Dwellings.							
Total number now on register ...	7	2	6	2	2	19	28
Number found dirty	—	—	—	—	—	—	—
16. Bothies, Chaumers.							
Number occupied	—	—	—	—	—	—	—
Number unsatisfactory	—	—	—	—	—	—	—
Number of nuisances	—	—	—	—	—	—	—
18. Piggeries.							
Total number now on register ...	6	6	4	2	—	18	23
Contravention of Byelaws	—	10	—	—	—	10	9
Number of nuisances	—	19	1	—	—	20	8
Number of prosecutions	—	—	—	—	—	—	—

TABLE XV—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1966 1965	
19. Offensive Trades.							
Total number now on register ...	3	5	36	—	—	44	44
Number of irregularities ...	—	1	40	—	—	41	31
Number of prosecutions ...	—	—	—	—	—	—	—
20. Rag Flock.							
Total number now on register ...	11	7	17	14	10	59	61
Number licensed ...	1	1	3	3	—	8	10
Samples submitted for analysis ...	—	—	—	—	—	—	—
Certified not to conform to standard ...	—	—	—	—	—	—	—
Number of prosecutions ...	—	—	—	—	—	—	—
Number of Irregularities ...	—	—	—	—	—	—	—
21. Broker's Premises.							
Total Number registered ...	6	15	20	6	4	51	52
Number dirty ...	—	—	1	—	—	1	—
Number of other nuisances ...	—	4	—	—	—	4	14
24. Food Premises							
Number in Division ...	1,099	783	986	1,033	630	4,531	4,235
Number of Premises visited ...	172	239	188	378	592	1,569	1,518
Number defective in light and ventilation ...	1	2	18	—	2	23	44
Number sanitary conveniences defective or required ...	26	8	16	5	3	58	214
Washing facilities required ...	18	2	21	1	17	59	292
Lack of personal cleanliness in foodhandlers and dirty equip- ment ...	51	16	103	2	158	330	517
Number of Other Nuisances ...	121	109	89	—	11	330	183
Number of Irregularities ...	346	137	—	2	—	485	1,330

TABLE XV—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1966 1965	
29. Work of Public Health Nurses.							
(a) Verminous Children.							
Number of visits to schools ...	141	209	746	81	100	1,277	1,188
Number of children submitted for inspection ...	9,137	17,445	57,334	6,043	6,512	96,471	98,150
Number of children found with major infestation ...	106	7	316	34	—	463	473
Number of children found with minor infestation ...	1,180	3,066	6,538	352	716	11,852	11,464
Number of children found with fleas ...	—	2	8	—	5	15	14
Number of children found dirty	—	108	1,092	—	351	1,551	1,565
Number of written notices ...	—	32	391	43	—	466	530
Number of children cleaned by guardians ...	117	689	5,939	67	422	7,234	7,441
Number of children cleaned by officers ...	29	17	201	—	1	248	179
Number of children re-inspected	3,450	2,871	16,619	555	2,613	26,108	26,227
(b) Homes of Verminous Children.							
Number of houses inspected ...	249	649	2,571	17	314	3,800	3,889
Number of houses found dirty	—	—	29	—	—	29	—
Number of houses with dirty bedding ...	—	—	18	—	—	18	—
Number of written notices ...	98	—	45	—	—	143	—
Number of re-inspections ...	—	13	337	—	—	350	1,343
Number of houses cleaned ...	—	—	30	—	—	30	—
Number of bedding cleaned ...	—	—	21	—	—	21	—
(c) Other							
Care of old people ...	8,808	11,742	6,256	2,088	6,967	35,861	34,236

TABLE XV—Continued.

OPERATIONS OF SANITARY SECTION—Continued.

	Central	North- ern	Eastern	South- Eastern	South Western	City 1966	1965
30. Work of Housing Health Visitors.							
Houses other than Corporation Houses—							
Number of houses visited ...	—	34	84	58	—	176	267
Number of houses found dirty	—	1	54	4	—	59	88
Number of houses with dirty bedding ...	—	—	46	1	—	47	13
Number of houses—Written notices ...	—	—	89	—	—	89	34
Number of houses—Re-visits ...	—	9	370	34	—	413	275
Number of houses found cleaned	—	—	44	4	—	48	83
Number of houses—Bedding found cleaned ...	—	—	29	1	—	30	7
Corporation Houses—							
(a) Re-housing Scheme Visitation.							
Number of visits (See page 304 for details) ...	671	22,693	29,819	989	727	54 899	36 295
(b) Intermediate Housing Scheme Visitation.							
Number of houses visited ...	1,291	416	5	44	—	1,756	952
Number of houses found clean	1,015	200	2	31	—	1,248	447
Number of houses found fair ...	276	216	1	12	—	505	270
Number of houses dirty ...	—	—	1	1	—	2	19
Number of houses with dirty bedding ...	—	—	1	—	—	1	—
Number of written notices ...	—	—	3	—	—	3	—
Number of re-visits ...	370	331	38	406	—	1,145	325
Number of houses found cleaned	—	—	2	1	—	3	8
Number of bedding found cleaned ...	—	—	1	—	—	1	—
(c) Ordinary Housing Visitation							
Number of houses visited ...	380	65	3,598	37	—	4,080	4,920
Number of houses found clean	367	25	3,218	31	—	3,641	4,039
Number of houses found fair ...	13	40	301	6	—	360	861
Number of houses found dirty	—	—	74	—	—	74	4
Number of written notices ...	—	—	95	—	—	95	4
Number of re-visits ...	—	26	322	64	—	412	190
Number of houses found cleaned	—	1	75	—	—	76	21

TABLE XVI.—GLASGOW.—POPULATION; BIRTHS AND DEATHS; BIRTH-RATES AND DEATH-RATES PER 1,000; ALSO DEATHS UNDER 1 YEAR, AND DEATH-RATES PER 1,000 BIRTHS SINCE 1911.

Year	Population	Births	Deaths	Birth-rate per 1,000	Death-rate per 1,000	Deaths under 1 Year	
						Number	Rate per 1,000 Births
1911	784,680	21,755	13,899	27·7	17·7	3,016	139
1912	785,600	22,044	13,797	28·1	17·6	2,740	124
1913†	1,021,789*	28,688	17,693	28·1	17·3	3,706	129
1914	1,028,440	29,462	17,522	28·6	17·0	3,913	133
1915	1,035,091	27,943	20,159	27·0	19·5	4,007	143
1916	1,041,742	27,094	16,601	26·0	15·9	2,996	111
1917	1,048,393	24,030	16,691	22·9	15·9	3,089	129
1918	1,055,044	23,524	18,362	22·3	17·4	2,660	113
1919	1,061,695	25,835	18,237	24·3	17·2	2,937	114
1920	1,068,346	32,626	16,765	31·5	15·7	3,477	107
1921	1,075,000	29,712	15,625	27·6	14·5	3,138	106
1926	1,090,380*	24,541	15,731	22·7	14·6	2,548	104
1931	1,088,461	22,926	15,505	21·1	14·2	2,397	105
1932	1,088,215†	22,732	16,071	20·9	14·8	2,542	112
1936	1,087,230	22,273	16,406	20·5	15·1	2,429	109
1937	1,086,984	22,176	16,379	20·4	15·1	2,313	104
1938	1,092,968*	21,979	15,016	20·1	13·7	1,919	87
1939	1,092,722	21,682	15,010	19·8	13·7	1,737	80
1940	1,092,476	20,965	17,603	19·2	16·1	1,983	95
1941	1,092,229	20,365	16,301	18·6	14·9	2,267	111
1942	1,091,983	20,615	14,679	18·9	13·4	1,863	90
1943	1,091,737	22,363	14,824	20·5	13·6	1,825	82
1944	1,091,491	22,203	14,603	20·3	13·4	2,108	95
1945	1,091,245	20,294	13,941	18·6	12·8	1,379	68
1946	1,090,998	23,560	14,502	21·6	13·3	1,588	67
1947	1,090,752	25,829	15,266	23·7	14·0	1,989	77
1948	1,090,506	22,292	13,620	20·4	12·5	1,241	56
1949	1,090,260	20,923	14,203	19·2	13·0	1,033	49
1950	1,090,013	20,031	14,090	18·4	12·9	879	44
1951	1,089,767	20,091	14,312	18·4	13·1	922	46
1952	1,086,202	20,337	13,841	18·7	12·7	831	41
1953	1,082,796	20,232	12,827	18·7	11·8	723	36
1954	1,079,311	20,977	12,750	19·4	11·8	736	35
1955	1,075,825	21,023	13,275	19·5	12·3	765	36
1956	1,072,340	21,885	13,194	20·4	12·3	720	33
1957	1,068,855	22,413	13,177	21·0	12·3	774	35
1958	1,065,369	22,760	13,454	21·4	12·6	800	35
1959	1,061,884	22,598	13,536	21·3	12·7	799	35
1960	1,058,398	23,092	13,037	21·8	12·3	743	32
1961	1,053,100	22,842	13,368	21·7	12·7	703	31
1962	1,044,500	23,491	13,224	22·5	12·7	762	32
1963	1,029,147	22,618	13,717	22·0	13·3	722	32
1964	1,018,582 ^a	22,405	12,277	22·0	12·1	642	29
1965	1,000,857 ^a	20,846	12,761	20·8	12·7	586	28
1966	979,798 ^a	19,766	12,441	20·2	12·7	598	30

* Extended City. ‡ Births and Deaths from 1913 are corrected for transfers.

† Intercensal populations and rates in the years 1932 to 1950 inclusive were revised in 1951 and those for 1952 to 1960 in 1961.

^a Midyear.

APPENDIX B.—TABLE I.

STATEMENT OF CASES TREATED IN EACH OF THE THREE FEVER HOSPITALS BASED ON DISMISSALS AND DEATHS
FOR YEAR 1966.

	Admitted		Dismissed		Died		Mortality Per cent.	Average Residence		Altered Diagnosis	Ruchill		Belvidere		Knightswood		Total Days' Residence	
	Males	Females	Males	Females	Males	Females		Dis- missals	Deaths		Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebrospinal Fever	20	8	19	10	2	1	10.7	17	1	39	22	1	7	2	—	—	492	3
Chickenpox	29	21	28	21	—	—	—	19	—	18	18	—	27	—	—	—	921	—
Continued and Undefined Fever	17	8	17	7	—	—	4.0	10	1	121	14	—	10	1	—	—	241	1
Diphtheria and Mem. Group	—	—	—	—	—	—	—	—	—	13	—	—	—	—	—	—	—	—
Dysentery	385	421	390	408	2	1	0.4	19	12	581	283	2	515	1	—	—	14,818	36
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	3	7	3	7	—	—	—	28	—	3	10	—	—	—	—	—	284	—
Erysipelas	3	13	2	13	1	—	6.2	23	1	10	11	1	—	—	—	—	352	1
Food Poisoning	30	32	31	32	—	—	—	21	—	17	31	—	32	—	—	—	1,302	—
Gastro Enteritis	158	104	153	103	5	4	3.4	17	1	407	58	2	198	7	—	—	4,468	13
German Measles	2	—	2	—	—	—	—	6	—	5	—	—	—	—	—	—	12	—
Impetigo	1	5	1	4	—	—	—	15	—	1	5	—	—	—	—	—	74	—
Influenza	6	10	6	10	—	—	—	9	—	5	11	—	5	—	—	—	150	—
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	6	—	6	—	—	—	—	—	—	4	4	—	—	—	—	—	—	—
Measles	153	109	136	102	1	—	0.4	12	2	56	109	—	2	1	—	—	70	2
Mumps	25	23	24	24	—	—	—	13	—	12	17	—	129	—	—	—	3,255	—
Ophthalmia Neonatorum	14	5	14	3	—	—	—	—	—	1	9	—	31	—	—	—	613	—
Paratyphoid Fever	2	—	2	1	—	—	—	39	—	2	1	—	2	—	—	—	245	—
Pemphigus Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	117	—
Poliomyelitis Acute	—	—	—	—	—	—	—	—	—	7	—	—	—	—	—	—	—	—
Pneumonia, Acute Influenzal	3	—	—	3	—	—	—	—	—	6	2	—	—	—	—	—	57	—
Pneumonia, Acute Primary	820	563	788	546	63	47	8.0	19	19	879	366	55	902	46	56	9	27,062	2,071
Puerperal Fever	—	1	—	1	—	—	—	8	—	1	—	—	1	—	—	—	8	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	12	22	12	22	—	—	—	9	—	25	6	—	28	—	—	—	322	—
Trachoma	1	—	1	—	—	—	—	21	—	—	—	—	—	—	—	—	23	—
Tuberculosis, Pulmonary	41	17	47	14	2	1	5.2	54	17	34	15	3	20	—	26	—	3,308	50
Tuberculosis, Non-Pulmonary	6	6	6	6	—	—	—	107	—	1	4	—	6	—	—	—	1,285	—
Veneral Disease	—	—	—	—	—	—	—	54	—	—	13	—	1	—	—	—	749	—
Weil's Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	81	84	81	80	—	—	—	22	—	35	60	—	101	—	—	—	3,637	—
Babies with Mothers	5	7	5	7	—	—	—	8	—	—	—	—	12	—	—	—	99	—
Unclassified (Staff)	1	1	—	—	—	—	—	2	—	2	—	—	—	—	—	—	2	—
No apparent Disease	70	59	69	60	169	75	8.0	9	39	201	72	76	56	126	1	—	1,128	—
Others	1,865*	1,189*	*1,697†	1,117*	—	—	—	20	20	201	1,331*	—	*1,269†	—	214	42	55,465	9,576
Total	3,758	2,732	3,541	2,611	245	130	5.8	20	31	3,480	2,484	140	3,369	184	299	51	120,559	11,753
Phthisis	660	377	543	343	125	43	10.2	62	42	—	715	151	174	17	—	—	55,277	7,010

* Includes 1 Typhoid Carrier.

† Includes 1 Salmonella Carrier.

• 1 Typhoid Carrier.

APPENDIX B.—TABLE II.
 FEVER HOSPITALS. DEATHS FROM CERTAIN CAUSES, ACCORDING TO SEX AND AGE, FOR THE YEAR 1966.

	MALES													FEMALES												
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total
Cerebrospinal Fever	1	—	—	—	—	1	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	1
Chickenpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	1	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	1	1
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Food Poisoning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gastro-enteritis	5	—	—	—	—	—	—	—	—	—	—	—	5	4	—	—	—	—	—	—	—	—	—	—	—	4
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid B.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Primary	7	2	1	—	—	—	—	—	—	5	9	39	63	4	2	—	1	—	1	—	—	1	5	6	27	47
Pneumonia, Influenzal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-myelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis Pulmonary	—	—	—	—	—	—	—	—	—	—	1	1	2	—	—	—	—	—	—	—	—	—	—	1	—	1
Tuberculosis Non-Pul.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Veneral Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weil's Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others	7	1	3	—	2	—	1	2	8	20	52	73	169	*5	—	2	2	—	1	1	1	1	8	15	40	76
Total	22	3	4	—	2	1	1	2	8	25	62	115	245	14	2	2	3	—	2	1	2	1	13	22	68	130
Phthisis	—	—	—	—	—	—	—	2	5	12	50	56	125	—	—	—	—	—	—	—	3	3	7	12	18	43

* Continued Fever, 1.

APPENDIX B.—TABLE III.

FEVER HOSPITALS. DISMISSALS AND DEATHS ACCORDING TO SEX AND AGE, FOR THE YEAR 1966.

DISEASES	MALES										FEMALES															
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebrospinal Fever	9	3	5	1	1	1	—	—	—	—	—	—	21	4	1	2	1	1	1	—	1	—	—	—	—	11
Chickenpox	2	3	7	5	—	3	3	3	1	—	—	—	28	1	1	7	4	1	1	3	1	1	—	—	1	21
Continued and Undefined Fever	1	—	3	2	1	1	2	5	2	—	—	—	17	3	—	1	—	—	—	—	2	—	1	1	—	8
Diphtheria and Mem. Group	73	73	150	64	13	1	1	9	2	2	1	3	392	40	70	138	48	15	13	24	26	3	8	6	18	409
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	3	—	2	1	1	—	1	—	1	—	—	—	—	7
Enteric Fever	—	—	2	—	—	—	—	—	—	—	—	1	3	—	1	1	5	—	1	—	5	2	2	1	—	13
Erysipelas	8	2	3	3	3	2	2	3	1	1	1	1	31	5	1	1	5	1	1	1	1	2	3	5	2	32
Food Poisoning	140	14	3	1	—	—	—	—	—	—	—	—	158	93	9	1	—	—	—	—	1	—	1	—	2	107
Gastro Enteritis	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	4
German Measles	—	—	1	—	—	—	—	—	—	—	—	—	1	—	1	3	—	—	—	—	—	—	—	—	—	10
Impetigo	—	—	2	—	—	1	—	1	2	—	—	—	6	—	—	2	1	2	3	—	—	—	1	—	—	—
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	—	—	—	—	—	—	2	1	1	2	—	—	6	—	—	47	15	—	1	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	1	1	1	1	—	—	137	8	30	9	10	2	1	—	—	—	—	—	1	102
Measles	24	28	57	26	—	1	1	1	1	1	—	—	24	3	1	9	10	2	2	—	—	—	—	—	—	24
Mumps	1	—	11	7	2	—	—	—	—	—	—	—	14	—	—	—	—	—	—	—	—	—	—	—	—	3
Ophthalmia Neonatorum	14	—	—	—	—	1	—	—	—	—	—	1	2	—	1	—	—	—	—	—	—	—	—	—	—	1
Paratyphoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paraphingis Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis, Acute	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Acute	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	1	—
Influenzal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Pneumonia, Acute Primary	252	69	117	50	12	10	10	8	40	56	98	129	851	183	55	67	38	5	9	3	13	16	31	41	122	583
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	6	6	—	—	—	—	—	—	—	—	12	1	1	5	13	1	—	1	—	—	—	—	—	22
Trachoma	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	3	—	3	3	3	3	2	15
Tuberculosis, Pul.	1	—	1	—	—	1	5	5	3	6	16	10	49	—	—	—	1	—	3	1	3	3	3	2	—	6
Tuberculosis, Non-Pul.	—	1	—	—	—	—	1	1	2	—	—	1	6	—	—	—	—	—	7	1	—	—	2	—	—	13
Veneral Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weil's Disease	46	16	16	3	—	—	—	—	—	—	—	—	81	37	19	26	3	1	—	—	—	—	—	—	—	86
Whooping Cough	5	—	—	—	—	—	—	—	—	—	—	—	5	7	—	—	—	—	—	—	—	—	—	—	—	7
Babies with Mothers Unclassified (Staff)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
No apparent Disease	13	6	6	16	2	1	3	7	6	2	5	2	69	11	1	7	9	2	2	3	7	3	7	1	3	60
Others	353	*123	188	114	64	40	43	79	478	137	289	357	1,866	233	93	135	92	51	35	36	58	52	83	94	229	1,192
Total	942	338	579	298	98	64	76	123	136	208	416	503	3,786	629	290	452	1241	85	80	73	119	82	144	154	392	2,741
Phthisis	—	—	2	7	6	15	29	42	70	105	220	172	668	—	—	2	3	8	18	15	52	46	71	69	102	386

* Salmonella Carrier.

† Typhoid Carrier.

‡ Typhoid Carrier.